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DRUGS AND THE MASS MEDIA

A study of Saudi Arabian mass media prevention of drugs

Thesis submitted for the degree of Doctorate of Philosophy

By

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Social Sciences Department
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January 1995
To my parents spirits
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Abstract

The mass media nowadays hold a high position in the educational world, and have a strong influence over societies. They influence and shape people’s thoughts and behaviour. They have been used for a long time in many western countries in drug prevention campaigns, both successfully and unsuccessfully, Drug abuse has recently become a serious problem in Saudi Arabia. At first the Government tried to tackle the problem only by using the police force and without any publications. However, recently the Government has tried to utilize the advantage of the widespread mass media in teaching the population about the dangers of drug abuse. It started to publish a large amount of information about drugs in the mass media.

This study is an evaluative research to assess the Saudi Arabian mass media coverage of the drugs issue in two respects. First is a study of the content of the coverage with regard to its presentation, style, and appeal. The second part concentrates on the effect of that coverage on the target audience: Saudi Arabian pupils, their knowledge and attitudes toward drugs, and whether those publications have benefitted them or not.

This study has adopted the information-processing model as a theoretical framework. According to that model the first step in the change process is exposure to the message with a certain level of attention, that will lead to increase in knowledge and that automatically will lead to attitude change.

The respondents’ exposure to the newspaper messages about drugs has been measured and the result indicates that the majority of the respondents received the messages and are interested, like and believe them. Statistical tests indicate that their knowledge about drugs has been increased. Their attitudes have been assessed and the results indicate that most Saudi Arabian pupils aged from 12 to 25 years old have negative attitudes towards drugs. The results indicate that the newspaper coverage of the drugs issue has had some influence upon the Saudi Arabian pupils’ knowledge and their attitudes towards drugs.
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XI
CHAPTER ONE

1)- An introduction to the study.
2)- The statement of the problems
3)- Significance of the study
INTRODUCTION

Drug abuse has become a serious problem and is worldwide. However the rate of prevalence of drug abuse differs from country to country and many studies suggest different findings. In the Arab World lack of detailed academic research and longitudinal surveys of drug abuse, create a big obstacle to predicting the prevalence of drug abuse and the extent of the problem. In the eyes of Islamic Law using any illegal kind of drug is regarded as a criminal activity and receives punishment. It also stigmatises the user. This means users are reluctant to admit to using illegal substances. However, the number of arrests indicates that a drugs phenomenon does exist in the Arab world.

There are variations in the extent of use throughout the Arab world. In Lebanon for example cannabis is grown and, indeed during the civil war the United Nations reported that Lebanon was the highest producer country of cannabis in the world (UN, 1983). In Egypt an estimation of the number of drug users in 1985 was put at 1.7% of the whole Egyptian population. The security authorities confiscated 21,000 plants of cannabis and 2,463,000 plants of opium. (Mansour, 1987). In Syria the security authorities confiscated 2059 kg of cannabis in 1980, while the Jordanian authorities confiscated 386 kg in 1983. The situation in Morocco is the worst of all: Morocco is considered to be the key to trading and abusing drugs throughout that region. In 1983 the authorities confiscated 32,821 kg of cannabis (Arabic Office of Drug Affairs, 1983) In Kuwait the authorities confiscated 45,853 kg of cannabis, 9,285 kg of heroin and 3,127 of opium in 1983 (Mosaiker, 1985).

Despite the conservatism of Arab society, and the strict law for users including the death penalty for smugglers, Saudi Arabia is not exempt from
problems of drug abuse. There are police drug departments in every major city in the country. Also there are three specialist hospitals dealing only with drug addicts - and the presence of a large amount of media attention about drug use generally.

Like the rest of the Arab countries the figures for drug abuse in Saudi Arabia come from government records. Since 1986 the Interior Ministry has started to publish a statistical table of drug cases every year. In 1982 the Saudi Arabian authorities in an attempt to combat the smuggling of drugs confiscated 1,118 kg of cannabis and 17 kg of heroin. That figure increased in 1984 to 6,028,346 kg of drugs, 18% of that number was cannabis and 1% heroin and opium (Interior Ministry annual report, 1986). In 1986 the number of smuggled drugs reached 24,815,020 kg, 9.7% of that was cannabis and 0.3% was heroin and opium, and 10,322,947 other drugs in the form of tablets. (Interior Ministry annual report, 1986). The latest statistical table about drugs published by the Interior Ministry in 1991 reported that 3,725 kg of cannabis, 89 kg of heroin, 28 kg of opium and 2,140 kg of cocaine and 1,949,619 pills were seized. (Interior Ministry annual report, 1991).

The number of arrested people who were involved with drugs, whether smugglers, dealers or users, in 1986 was 6,047, of which 59% were users, 34% were dealers, and 7% were traffickers. The total number of Saudi Arabian nationals among that figure was 3,980, while the other 2,066 were non-natives or foreigners (Interior Ministry annual report, 1986). In 1991 the number of arrested people decreased to 5,515. The majority of them, 3,698, were users of drugs, while 1,473 were dealers, and 344 were smugglers. Of the number arrested 4,033 were Saudi Arabian nationals, and 1,482 were non-natives or
foreigners (Interior Ministry annual report, 1991). According to the Interior Ministry and the custom records the most common kinds of drugs in the country are pharmaceut tablets and hashish.

This widespread health and social problem has been counteracted by an intensive effort to aid those who are already involved and to protect others by all available means. In many developed countries such as USA and Britain educational programmes in schools are used for teaching children about the dangers of drugs as well as by others means such as mass media.

The role of the mass media

The mass media today has an extremely wide audience. It has been said that it plays a very important role in the formulation of people's opinions and in affecting their behaviour and attitudes. Garrison (1979) found that the mass media has a significant influence on children even in their early stages of life and are likely to affect attitudes and behaviour. In the last few decades of this century the mass media has had a significant impact on many aspects of people's life style. In advanced societies such as in Britain the mass media is strong and dominates many organisations. It also has been said it influences the way of thinking of ordinary people. It is no exaggeration to say that the mass media can be seen as the most important element of communication in the advanced countries and that mass communication is regarded as the most important feature of this era. Corner et al (1982) suggested that:

"That the media are powerful and exert an influence over social organisations and social change (which) would appear to be the strong if unspecified assumption of most people." (Corner et al, 1982, p. 146)
Danis McQuail (1983) emphasised the effect of the mass media when he said "The mass media are a power resource- a means of control, management and innovation in society, which can be a substitute for other resources" (McQuail, 1983, p. 3)

As a powerful and influential tool, the mass media has been used to teach and enlighten the public about the dangers of drug abuse. It is argued that over the past three decades it has influenced and shaped modern societies; it has been used as a primary tool for delivering messages, for improving public health, including that relating to substance abuse. In developed countries such as the USA and Britain it has been employed by government institutions to confront that problem. Media intervention has been in the form of campaigns to disseminate information about drugs, the aim of which was to enlighten people and to affect their attitudes toward drugs and drug abuse. Flay et al (1987) reported that the mass media has a significant value in preventing adolescents from abusing substances, and has access to their homes to provide them with a rich variety of information about drugs. In the United Kingdom, Davies, J. (1988) stated that, "The last three years have seen an unprecedented explosion of interest in the drugs problem, both in the United Kingdom and overseas. Due to the level of concern in the population, the British Government has developed a comprehensive strategy to tackle this problem. One of the more controversial aspects of this strategy has been the use of high profile mass media prevention campaigns." (Davies, 1988, p. 23)

Wallack has summarised the attractiveness to society of the mass media for addressing social and health problems. Firstly he sees the use of the media as consistent with the inherently individual nature of such problems. Secondly,
he considers that any attempt to tackle social problems through information or education would be unwise to ignore or avoid external factors. Thirdly the reach of the mass media is so great that it would be foolish to risk the loss of even a small effect (Wallack 1989).

Studies of the use of mass media for the prevention of drug abuse go back to the early 1970s, (Wallack 1986). However, a review of the literature demonstrates some conflicting results. Many studies suggest that the mass media are powerful tools for the diffusion of information about drugs and are capable of combatting that problem. At the same time others regard the mass media as ineffective or having only a mild influence on the prevention of drugs abuse.

From a historical point of view, assessment of the impact and power of the mass media can be divided into three distinct stages. First, the view held in the 1930s and 1940s, which regarded the mass media as powerful and influential tools which had strong direct effects ("the hypodermic needle effect"). Second, that which looked at the mass media as weak tools with little or no effect, and no ability to affect people except reinforcing their previous beliefs, ("the minimal effects"), this view was held in the 1950s and 1960s. Finally the third one, which regards the mass media as an effective and influential means, but indirectly and only under certain conditions: these must be cumulative and repeated to reinforce the effect of the messages, (Katz 1980; Maccoby and Roberts 1985; Alcalay and Taplin 1989). These views can of course also be applied to the mass media drug prevention campaigns.

Since World War II mass media campaigns have been implemented for improving public health, for example through diet and smoking behaviour, but
only a few of them have been evaluated with regard to their effects. Moreover, much of the available research evidence seems to be invalid because of doubtful methodological, technical and administrative issues. (Flay 1981; Flay and Cook 1981). There is considerable conflict regarding the effectiveness of the mass media on health in general terms and drug abuse prevention in particular. The theory which regards the mass media as a powerful, influential tool with strong effects on the audience is still popular among practitioners, especially in the mass media organisations and large segments of the public. However, this view is not always held among academics especially those who have carried out evaluation research concerned with assessing the actual impact of the mass media, (Atkin 1981).

Generally, and according to the review of much of the available literature on drug abuse prevention, the research findings about the mass media in the prevention of drugs abuse can be categorised into two views: First, there is the view which believes that the mass media are influential and the most popular source of information about drugs. Here the mass media can be seen as being capable of having a strong effect for inducing healthy or unhealthy agendas by emphasizing certain behaviour, (Maccoby and Shaw 1973). It can also have strong effects on developing and cultivating specific health beliefs and behaviour. (Gerbner and Gross 1976). Based on their findings Smart and Fejer suggested that the mass media are an apparent source of knowledge about drugs among certain groups such as high school pupils, (Smart and Fejer 1972). Another study which supports the theory that the mass media has strong effects, is the study by Irgens-Jensen and Brun-Gulbrandsen. They have measured the attitudes of the whole Norwegian Population towards drugs after a campaign
against drugs. Their findings suggest that the mass media has succeeded in introducing a negative attitude towards drugs throughout the population. (*Irgens-Jensen and Brun-Gulbrandsen 1971*)

The mass media seems to work better when it is aimed at promoting awareness and knowledge rather than at changing attitudes or behaviour. Some research indicates that the mass media can create awareness and knowledge about drugs with subsequent prevention of abuse, (*Flay 1986; Pentz 1985*). For example a study by Sheppard suggests that the mass media are an important source of information and a place for adolescents to get knowledge about drugs, as well as a means of gaining the trust of both drug-users and non-users, (*Sheppard 1980*). A study of more than 10,000 pupils in grades seven to fourteen by *Fejer, Smart, Whitehead and Laforest (1971)* indicated that the news media were found to be the most important source of information about drugs among these pupils.

Second, there is the opposite approach; i.e. the one which believes that the mass media has no effects on changing attitudes and behaviour in drug abuse. A review of this part of the literature suggests that there are many factors which can affect the influence of the mass media in drug abuse prevention such as sufficiency of exposure, credibility of source of information, and the nature of the target receivers of the message. For example, Schlegel (1977) found that drugs users relied on personal contact for their information about drugs rather than mass media.

Third it has been argued that even though the mass media can increase knowledge and awareness about drugs they depend on a combination of other factors such as school’s and parent’s programmes in drug abuse prevention,
An evaluation study assessing the effect of drug abuse radio programmes about drug abuse by Knapp (1977), found that the programmes were generally ineffective. Moreover, an evaluation of the effects of the public services campaign on television and radio in the USA indicated that the change in attitudes and behaviour was small, (Hanneman 1977). Another study was conducted on medical students which suggested that the majority of them identified other sources such as peers to be more important than the mass media as a source of information about drugs.

Generally, diffusion of information about drugs via the mass media is growing. In spite of that there is no valid data to indicate the real effects it has on changing attitudes to drug use. In the research presented here I hope to make some contribution to the knowledge of how the mass media in Saudi Arabia can be used to affect behaviour and attitude through an increase in knowledge.

**Evaluation of the impact of mass media drug abuse prevention programmes**

An evaluation of the impact of a mass media prevention campaign is necessarily complex. It involves many factors and variables which can have a major effect on attitudes and behaviour. Some of these factors relate to the attributes of the receivers, while others involve the message itself. Most evaluation studies and their findings have been carried out in Western countries; mostly in USA, Britain, Canada and Australia and depend on western theories. These countries and some other developed countries have relatively long experience of using the mass media for health education, including drug abuse. This experience has
been analysed by research in various fields:

**Users and non-users**

Previous research with college students in the USA regarding their sources of information about drugs has divided them into drug users and non-users. It was found that for drug users personal contact was more important as a source of information than the mass media. In contrast the non-users regarded the mass media as one of their most significant sources of information, *(Hanneman 1973)*.

Ten years later the users were still found to be less likely to watch and trust programmes which told them how to stop using drugs, while the non-users were more likely to attend to programmes which told them how to remain non-users, *(Flay & Sobel 1983)*.

**Age variable**

Another element which has been found to have a strong influence on the effect of the mass media in general and drug abuse prevention in particular is the age variable. It is believed to be one of the most important characteristics of the target audience to be considered by the communicators. It is thought that many studies have failed to achieve their aims because they designed irrelevant messages for specific age groups. So for example a message which is valid for parents for instance, is not always suitable for children. For example teenagers seem to reject messages with high fear appeals, *(Atkin 1979)*. In my opinion this is due to their familiarity with drugs. The mass media might exaggerate in their threats about the danger of drugs but most teenagers have some
experience, or at least some knowledge about drugs. However, when the drug is new to the youngsters and they do not know about it, the messages with high fear appeals seem to be effective. (Smart and Fejer 1974).

**Message Content**

Some other factors that influence the effectiveness of the mass media in drug abuse prevention refer to the messages of the media. One of these factors is the appeal of the message. Using fear appeals as a motivation for the receivers to not use drugs was reported in some studies to be effective, yet not effective in others. A review of anti-drug public service announcements in the USA for more than five years suggested that many programmes relied heavily on fear appeals. The findings indicated that these programmes were almost always ineffective, (Capalaces and Starr 1973). In contrast findings by Goldstein (1974) reported that the most effective message was the educational message ie. not an information which had frightening consequences.

However, besides these studies that see fear as an ineffective appeal, there are nonetheless some other studies which believe that the message with high fear appeal is highly effective. For example in the case of preventing use of a new kind of drug Smart and Fejer (1974), suggested that high fear appeal is effective. In their study of a new drug called M.O.T. they found that the students who received high fear appeal messages were less likely to try the drug and more likely to reject any statement suggesting its legality.

Ways of presenting desirable attitudes and behaviour are very important factors in affecting the strength or weakness of the mass media impact. Feingold and Knapp (1977), in their study of ten high schools found that using
explicit aims was much better than using implicit conclusions. Another factor which should be considered regarding the message is its goals; they should be defined clearly and measurably, *(Department of Health and Human services, USA 1983)*.

A mass media factor which increases the likelihood of success of the prevention programmes is the source credibility. *Goldstein (1974)* reported that the media message can only be effective when it is presented by someone in whom the target audience can believe and whose knowledge and lifestyle they respect.

The appropriate timing of the media programmes is also one of the media factors which influences their effectiveness. A programme presented via an unpopular medium or unsuitable time will not reach its target audience and as a result can not affect them. For example, during 1972 a youth-oriented campaign was aired in the day time when most of the pupils were in school. The later survey found that only 2% had written to the address for more information, *(Hanneman and McEwen 1973)*.

**The problem and the significance of the study**

The role of the mass media in health education and drug abuse in particular has, to the best of my knowledge, never been studied in the context of Saudi Arabia. This study will therefore look in depth at both the attributes of the receivers and the message content in the context of the drug prevention media campaign in Saudi Arabia. It is an attempt to assess whether the mass media played an influential role in combating drug abuse in this country. It examines the extent of the Saudi Arabian mass media coverage against the prevalence of
drug abuse for its content and on the other hand it examines effects on the target audience knowledge of and attitudes towards drug abuse.

Most evaluation studies have been carried out in Western Countries. These countries have relatively long experience of using the mass media for health education including that of drug abuse. However in Saudi Arabia the situation is different. The government strategy for tackling the prevalence of drug abuse has been by police action and secret methods, but without any sort of publication in the mass media before 1989, (Interior Ministry annual report 1991). Since that time the Saudi Arabian government has realised that the mass media could be a useful means for teaching the population about drugs, and has started to broadcast and publish some material in the form of campaigns against drugs. In some countries such as the United States of America and Britain such campaigns have been evaluated in terms of the extent of their coverage and their effects on the audience, but the role of the mass media in the use of drugs, in the context of Saudi Arabia, has, to the best of my knowledge, never been studied before and their effects have never been examined or evaluated.

Publishing and broadcasting materials about drugs in the mass media in Saudi Arabia have been surrounded by a great deal of debate, not only by many academics and religious scholars, who seem to have strong influence on the majority of the population, but also by many ordinary parents who are worried about their children becoming involved with drugs as a consequence of that publishing. Some of these dissenting opinions suggest that, although there are problems of drug abuse in the country, discussing it in front of all segments of the population, including children and teenagers, is taking a high risk. It is said to be introducing the audience to drug abuse especially those who have never
heard about drugs - which is believed to be a large number of the Saudi Arabian population - so it will have negative effects. This means it will increase the prevalence of drug abuse rather than having a positive effect and decreasing it. This study is an attempt to answer these questions about the effects of the Saudi Arabian mass media coverage of the prevalence of drug abuse and to determine whether the effect was positive or negative on the target audience’s knowledge about drugs and their attitudes towards them.

Some people suggest that Saudi Arabia does not have a serious problem of drug abuse. Such a campaign is therefore a waste of money, time and effort. Moreover it will attract the attention of the population and introduce fear among them in a matter which does not deserve such attention. However, this is not the case in my opinion. According to the available data mentioned previously (p.3) about the extent of the drugs problem in the country and the number of arrests each year, there seems to be quite a big problem facing the country which needs to be tackled. One purpose, therefore, of the current study is to shed some light on the prevalence of drug abuse among Saudi Arabian pupils aged from 12 to 25 years old.

The main significance, however, of this study is to discover the best strategy for utilizing the mass media and to gain benefit from their widespread availability. This can be of value to government departments in general and drug abuse prevention programmes in particular. It should be of interest to all decision makers even in national security affairs as well as broadcasters and all the mass media agencies, whether they be private or public. Hopefully it will provide them with an awareness and better understanding of the nature of the content of drugs coverage contents and their effect on the target audience.
Furthermore this study will expect to supply evidence of the relationship between the senders (i.e. mass media) and an important segment of the receivers (i.e. school pupils) with regard to their trust in the mass media in matters of public health and/or security. Moreover this study will also expect to contribute to the increase in knowledge in the field of mass media generally, and prevalence of drug abuse prevention in particular, especially in the Third World and in the Arab World.

In summary, the aim of this study as such as to shed some light on the following points:

1) The nature of the Saudi Arabian mass media coverage against drugs.
2) The extent of the prevalence of drug abuse in Saudi Arabia and whether that really needs to be prevented through the mass media or not.
3) The extent of the trust of the mass media by Saudi Arabian school pupils.
4) Whether the coverage of drugs and discussing this problem in the mass media has positive or negative effects on the prevalence of drug abuse.

Limits of the study

I have chosen to limit the study to a certain number of channels in the Saudi Arabian mass media, and to a specific age segment of the audience of these channels. In doing this, I have considered factors like popularity or circulation and availability of the required data, and the
feasibility of conducting the survey in a country like Saudi Arabia.

Three Arabic daily newspapers were chosen. These were from Riyadh, Jazera, and Okaz. The first two are published in Riyadh City, the third is published in Jeddah City. However, all three newspapers are read in all areas in Saudi Arabia. Since these three newspapers are among the most popular daily newspapers in Saudi Arabia it was thought they were likely to contain the materials about prevention of drug abuse required for the analysis. These three newspapers are not the only popular newspapers in Saudi Arabia, but to study all of them would be prohibitive in terms of the work of a single researcher.

For television, there are two channels in Saudi Arabia; channel one, which is in Arabic and channel two, which is in English. I have included channel one in the study and excluded channel two, because whilst all of the population of this study speak Arabic, only a few have studied English or were born in an English speaking country.

For the magazines, there are two public magazines in Saudi Arabia. The most popular one was chosen for the analysis, even though it may have a limited amount of published materials about drugs.

Radio was excluded because of its limited use among Saudi Arabian youth. Additionally, the radio station administration was not very helpful, and when they were asked to provide details of the drugs programmes in 1991 they were not willing to specify the broadcasting times. They only offered me permission to search their library over a whole year of broadcasting, but this was not satisfactory.

The second part of this study involves investigating the effect of the mass
media on the receivers of the message. The population to be studied are Saudi Arabian pupils aged from 12 to 25 years. They were selected for the following reasons:

1) Limited on age, because the likelihood of drug abuse was thought to be highest among young people in this age group.

2) Limited to pupils because the majority of the young people aged from 12 to 25 years old are in some form of full time education.

3) The difficulty, maybe impossibility, of getting permission from the Government to question people in places such as streets or houses whereas pupils could be surveyed within their educational institutions.

4) Finally the sensitivity of the drugs topic and the impossibility of getting real information about drugs and knowledge of the attitude of an individual person, particularly in a country like Saudi Arabia. Thus the only way to investigate is to ask people in groups and promise anonymity.

For the above reasons I decided to limit my study to examining the effect of mass media coverage on drug abuse on Saudi Arabian pupils aged from 12 to 25 years, including males and females.
CHAPTER TWO

1) Aims of the study

2) Methodology of the study
AIMS OF THE STUDY

As stated on the previous chapter, the main objective of this study is to examine aspects of Saudi Arabian mass media coverage involving drug abuse and to evaluate its impact on the audience. The method of the study is twofold. The first part is descriptive concerning the content of the Saudi Arabian mass media as it applies to drug abuse. The second part involves evaluative research on the impact of that coverage on Saudi Arabian pupils’ knowledge and their attitudes towards drugs.

PART ONE - Content

In the first part of the study I want to analyse the content of drug information in the mass media: i.e. the newspapers, television programmes and magazines. I shall describe the nature and the amount of the coverage under four headings:

Aim One

To examine some of the Saudi Arabian mass media coverage of the drug issue.

1) To determine the extent of the coverage.

2) To determine which medium has the lead in the coverage and has published more materials about drugs.

3) To determine which period of time received the most coverage.

Aim Two

To examine the sources of information about the mass media coverage.
Aim Three
To examine the content of the message of the mass media coverage.

1)- To determine the presentation of the message.
2)- To determine the themes of the coverage.
3)- To determine to what extent the mass media relied on fear appeals.
4)- To reveal the style of the message delivery.

Aim Four
To identify the target audience of the mass media coverage of the drug issue.

1)- To whom the messages were sent.
2)- To determine whether the definition of the target was direct or indirect.

PART TWO - the receivers

The main aim here is to determine whether the Saudi Arabian Government in producing the media coverage and teaching the population about drugs. If so does it try to convince drug users to stop using drugs and non users not to become involved? In other words, to see whether the government strategy is to affect the population’s knowledge of and attitudes towards drugs and as a consequence affect their behaviour.

Included in part two of this study is the aim to evaluate the impact of the newspapers coverage of drug issues on the Saudi Arabian audience’s knowledge and their attitudes towards drugs. If the Saudi Arabian pupils knowledge and attitude are influenced into not wanting to experiment with drug use then we
can conclude that the government has achieved some of its objective. The most important feature of an evaluation study is measuring the effectiveness of the programmes on the receivers (Flay & Cook, 1981). Samuel, B. (1976) suggests that: "a television programs impact study that does not measure effective and attitude dependent variables is probably incomplete"

Based on the so-called Yale theory we assume here that increasing the Saudi Arabian pupils knowledge and awareness about drugs will lead to certain attitudes toward drugs. The Yale or Hovland theory which was developed at Yale University in the United States of America assumes that the change process starts with delivering the message. It will then increase the amount of the knowledge and the awareness in order to lead automatically to a change in attitudes. That will lead in turn to a change in behaviour. McGuire’s persuasive matrix draws a line of evaluation on the impact of the communication on the change process. Here I want to rely on the McGuire matrix for evaluation of the Saudi Arabian newspapers coverage on the pupils knowledge and attitudes. Thus, to achieve the objective of part two of this study, eight aspects of the receivers have been selected for assessment. This should reveal the level of impact, and enable us to conclude whether the newspapers coverage of the drug issue has achieved its objective of affecting the pupils’ knowledge and attitudes or not.

This second part of the study has been limited to evaluating the effect of newspaper coverage only. It has been organised under eight headings each of which is correlated and then cross tabulated with four variables: gender, age, geographical region of residence and socioeconomic class. The following
aspects were examined:

1- **Relationship of the target audience with newspapers in general**
   To determine the validity of the vehicle which has delivered the message to the readers.
   
   A)- To determine the frequency of reading among the pupils.
   B)- To determine the duration of reading among them.

2- **Specific reading of the drug campaign coverage**
   To assess whether the pupils had read specifically about drugs in the newspapers
   
   A)- To determine their depth of reading about drugs.
   B)- To determine their awareness of the campaign coverage.

3- **Interest and belief in the coverage**
   To assess the interest and belief leading to gaining knowledge of the drug issues
   
   A) To determine the pupils strength of liking for the coverage.
   B) To determine their depth of belief of the coverage.
   C) To find out which particular source of information held the respondents trust and belief

4- **Family encouragement of interest in drug issues**
   To determine whether the family’s use of newspapers has some influence on the pupils knowledge and attitudes towards drugs.
   
   A)- To determine the family patterns of newspaper reading.
B)- To determine the family patterns of talking about drugs with the pupils.
C)- To determine the family encouragement of the pupils to read about drugs.

5- Experience of travel abroad
To assess whether the experience of foreign travel has influenced attitudes towards drugs
A)- To determine the number of respondents who had travelled abroad
B)- To determine the countries visited

6- Level of drug use
To assess the level of drug use among the target audience
A)- To determine the number of pupils who have tried drugs at any time
B)- To determine the respondents current use of drugs
C)- To determine the respondents knowledge of users who have recently stopped using drugs
D)- To determine the respondents knowledge of new users.

7- Knowledge and recall of information about drugs
This section assumes that newspaper coverage has reached its target audience and investigates the level of knowledge and recall. It will include an examination of the respondents sources of information about drugs in order to
evaluate the significance of the newspapers among other sources. In order to achieve this the following aspects are explored:

A)- To determine the respondents level of knowledge about drugs.
B)- To determine from which medium they gained their knowledge.
C)- To determine the extent of their recall of the coverage.

8 Present attitudes towards drugs

This last section assumes that the Saudi Arabian government launched prevention programmes through the mass media to create negative attitudes in the population towards drugs. As a consequence it was also assumed to influence behaviour, thus encouraging drug users to stop using drugs and to dissuade others from becoming involved with drugs. By assessing the above aims 2.1 -2.7 we will have established whether the messages reached the target audience, interested them and improved their knowledge and recall of the subject matter. However, the remaining and most important question is to assess whether the impact of the coverage was influential enough in order to create negative attitudes towards illicit drug use.

This is measured by an attitude scale for drugs, which is explained in the chapter on methodology.
METHODOLOGY OF THE STUDY

The survey is divided into two parts. As said previously Part one assesses the content of the materials and Part two assesses their impact on a sample of Saudi Arabian school pupils.

Part One: to quote again the point made by Samuel in 1976
"an impact study that does not measure the program content variable is probably misleading". Samuel, B. 1976.

In part 1 the methods used involved taking a sample of the newspapers, magazines and television programmes, which carried out the coverage and analysing them in order to determine whether they had conveyed the information to the audience or not.

Three aspects of the content was examined: the coverage of the campaign, the content of the message and the presenters of the information.

According to Leslie (1984) a mass media campaign can be evaluated by measuring the outreach (number of messages, extent of media distribution and number of target audience) and the products (knowledge and attitude changes). Many studies since then have used these as a measurement and a criteria for measurement with some success. These have, therefore, been chosen as the basis for the measurement of the effectiveness of the media coverage in the Saudi Arabian anti drugs campaign under review. This is seen to be consistent with the information model which suggests that exposure with attention and comprehension could lead to knowledge and attitude change.
Atkin (1981) states that the evaluation of the message itself should be concerned with three aspects: frequency, style and content appeals. These have been measured accordingly. Finally, the presenters of the information have been investigated and grouped according to their preferences for the type of presentation. eg. (a) experts such as doctors who preferred a technical message or complex topic, (b) ordinary people who have similar characteristics to the target audience and who are, therefore, seen by that audience as trustworthy and persuasive, and (c) dynamic and exciting sources such as well known sporting, social or media personalities.

Part two - Impact on the receivers

Generally, the effect of the mass media on a target audience is very difficult to measure. Most researchers in evaluative studies rely on a control group and comparisons with the treated group to find out the effect of the treatment variables on the target receivers. The research is usually conducted in a scientific environment faraway from the daily life and the receivers’ cultures. Hennigan, Flay, and Haag (1979), argued that there are three approaches to evaluation research. They are the experimental design, the quasi-experimental design and the non-experimental or statistical design; and all of these methods seem to be consistent with the information-processing model because they try to assess the level of input variables as a first phase of evaluation. It will be useful to give a brief definition of each of these.

The experimental design is simply based on a comparison between two or more random equivalent groups before and after the treatment variables, to determine the effect of the treatment on its target. The quasi-experimental
method also involves comparisons between groups before and after treatment, but they are not randomly selected. The non-experimental method depends on statistical comparisons. This method is called "retrospective" and measures the effect of the treatment after its completion.

The method chosen for this study relies on the third one, the non-experimental design. Firstly it examines the statistical relationships between the treatment variables, such as reading newspapers, frequency of reading and the pupils interest in the coverage. Secondly the outcome variables such as the knowledge and attitudes of Saudi Arabian pupils towards drugs are examined. By this method control was obtained through statistics and not by experimental method. This study involved a survey carried out on a random sample of Saudi Arabian pupils aged 12 to 25 years using a questionnaire to assess the impact of the Saudi Arabian Mass Media coverage of the drugs issue. The sample was large enough to include all who received the full coverage, those who have received part of it, and those who did not receive it at all.

The questionnaire included two instruments of measurement. In the first section, it contained direct questions in order to find out the general relationship between the newspapers and the pupils. These included on the one hand the level of reading, frequency, and the subjects interest in the drugs coverage, and on the other hand the variations between them with regard to their reception of the coverage. The second section involved a scale which measured their attitudes towards drugs and the drugs use.

Although an attitude is hard to define, psychologists claim it can be measured. There seems to be no agreement on a single acceptable definition of
an attitude among social scientists, but there have been several attempts to define it. Thomas (1975) defined attitude as a property of an individual’s personality less enduring than temperament, but more enduring than a motive or a mood. Fishbein and Ajzen (1975), gave another definition of attitude as “a learned predisposition to respond in a consistently favourable or unfavourable manner with respect of a given object” (Fishbein & Ajzen, p.6).

These and other definitions do not discard disagreements among specialists in this area. Despite disagreements most of them include some general characteristics: an attitude is learned, it has a predisposition to respond to a given object positively or negatively, and it seems to be difficult to change.

Thus, the attitudes of the subjects of this study, which are going to be measured, are their level of liking or disliking, favourableness or unfavourableness and acceptance or non-acceptance of drugs and drug-abuse in Saudi Arabia. Measurement attitudes, however, tends to produce more consensus but there are still several ways of approaching the task. The most convenient method of measuring the subjects of this study are to use Thurston’s Equal-Appearing Interval Scale and Likert’s Method Summated Rating. The information-processing model, as will be explained in the following chapter, has several steps including attitude change. Some of these steps can be determined by direct question or self report. However, this step of the model, the attitude change must be assessed by an attitude scale, and Likert’s scale seems to be the most appropriate one.

Thurston’s scale is complex and requires a long time to construct as a precise instrument of measurement. Thus the most appropriate one for this
study is thought to be the Likert’s scale.

"It has become a very popular in the study of social attitudes" (Thomas,K. 1979, p.3)

The simplicity of its construction and likelihood of greater reliability than Thurston’s scale (Sellitiz C. et al. 1971) gives it an advantage as the proper instrument of measuring the attitudes of the subjects of this study.

Unlike Thurston’s scale, Likert’s uses a clear degree of favourable and unfavourable items and no neutral items. Likert’s scale techniques - as do most other scales - starts with collecting a large number of items, which have to be favourable or unfavourable towards the object. The investigator decides for every item whether it was favourable or unfavourable. Any unclear statement or statement which might be seen as neutral towards the object is discarded. In other words, the function of the investigator at this stage is to place each statement into one of three categories: favourable, unfavourable or rejected. Statements in the first and the second categories are accepted to be offered to subjects, whereas statements in the third category are dropped.

Subjects are asked to indicate their agreement or disagreement for each statement by selecting one of five points: strongly agree, agree, undecided, disagree or strongly disagree. These points are given a numerical score ranging from (5) strongly agree with a favourable statement to (1) strongly disagree with the same statement. With unfavourable statements the scoring is reversed. To strongly disagree is to be given the highest score of (5), while to strongly agree is given the lowest score of (1). In other words a score of (5) is given to the strong agreement of a favourable statement and strong disagreement of an unfavourable statement, while a score of (1) is given to the strong
disagreement of a favourable statement and to the strong agreement of an unfavourable statement. For example a favourable statement such as (I think that drugs should be legalised) scores (5) for a strongly agreed point, and (1) to strongly disagree. However an unfavourable statement such as (I think that drugs are harmful) scores (1) for strongly agreed statement. The final attitude score is obtained by adding together all the subject's statements scores. The higher the score, the more favourable it is. For example, an attitude score for 10 statements could range from 50 for the highest favourable attitude to 10 for the lowest favourable attitude (see Table 1).

<table>
<thead>
<tr>
<th>The Subjects</th>
<th>The statements</th>
<th>Final score</th>
</tr>
</thead>
<tbody>
<tr>
<td>subject A</td>
<td>5 5 5 5 5 5 5 5 5 5</td>
<td>50</td>
</tr>
<tr>
<td>subject B</td>
<td>4 3 4 1 2 3 2 3 4 4</td>
<td>27</td>
</tr>
<tr>
<td>subject C</td>
<td>3 4 3 2 2 3 2 2 1 3</td>
<td>25</td>
</tr>
<tr>
<td>subject D</td>
<td>1 1 1 1 1 1 1 1 1 1</td>
<td>10</td>
</tr>
</tbody>
</table>

subject A is the most favourable
subject B is moderate
subject C is moderate
subject D is unfavourable
Methods of the Study

A four months visit to Saudi Arabia was undertaken in order to collect the data for content analysis and to undertake the survey. Using content analysis, data was collected from newspapers, magazines and television programmes about drugs. It was found there were not many difficulties, and the proposed methodology and sampling procedure were conducted and implemented as planned. All selected newspapers, magazine and television programmes about drugs were photocopied and recorded for analysis. The administrators of the newspapers, magazines and television were helpful and when they were asked for the materials they did not refuse. In the case of the newspapers and magazines manual searches were conducted by the researcher himself in the 1991 archives and all items related to drugs in that year were photocopied. In the television case the Planning and Programming Department, which is responsible for programme records was approached and it provided the researcher with a list of all the items and programmes related to drugs which were broadcast in 1991. When they were asked for copies of all these programmes and series they refused because there were a large number and it would cost them a lot of time and effort. However, they asked the researcher to select a sample and copied these on to a video tape.

Content Analysis Sampling Procedures

In order to study and analyse the contents of the mass media coverage of the drugs issue samples were taken from Saudi Arabian newspapers, magazines and television programmes. There are eight national Arabic
newspapers of a similar level of reporting in Saudi Arabia. All these newspapers were listed randomly by giving each of them a number and pulling that number out of a hat to avoid any bias. This gave a listing order of Belad Newspaper, Riyadh Newspaper, Madenah Newspaper, Okaz Newspaper, Nadwah Newspaper, Jazerah Newspaper, Reidiah Newspaper and Yawm Newspaper. Since the required number for analysis is three newspapers, the number of the population, i.e. eight newspapers, was divided by the required number in order to obtain the sampling fraction, which resulted in 2. So the start point must be one of the first two newspapers in the list. By pulling a number out of a hat the start point was selected for the study, which is number 2. Systematically every second item after the start point was selected for the analysis. This sampling procedure resulted in three newspapers: Riyadh Newspaper, Okaz Newspaper and Jazerah Newspaper.

In the case of television there were seventeen items, i.e. programmes which were broadcast to the audience by channel one on the Saudi Arabian Television during 1991. Some of them had up to fourteen episodes in a series. In the sampling procedure the number of episodes was ignored, the most important thing was the title of the items. All the programmes were given a numerical order from one to seventeen according to the Planning and Programming Department list. Since the required number was eight, which were the only programmed the research allowed, the sampling fraction was two. The start point was number two and systematically every second programme after the start point, number two, was recorded for the analysis. The remaining nine programmes were included in the analysis only for the time of viewing, duration, type of the programme, episode numbers and repetitions.
because these were available from the Department list. However, the aim of the programme, level of fear appeals, style and the source of information were excluded because they required the material itself.

The Survey Sampling procedure

This study is intended to be about pupils receiving education in Saudi Arabia (12-25 years old). The population is from secondary schools, high schools and universities. Saudi Arabia is divided into three major regions, Jeddah, Riyadh and Dammam. A random cluster sample was selected from each of these regions. The education authority in every region has a list of all schools and universities in its area. These schools and universities were listed and given numbers according to the education authority in the region. A systematic random sample of the schools was selected. Classrooms in the chosen schools were listed and given numbers according to their rank in the school. A sample of classrooms was drawn by use of a systematic random sample.

Since the subject of this study drugs and drug abuse, is a sensitive issue, particularly in a very conservative society such as Saudi Arabian society, the sampling unit was a classroom rather than an individual person. If the individual was identified by his/her name or personality and asked to give his/her real view about a sensitive subject like drugs and drugs-abuse, he/she might not feel able to be honest or give his real opinion.

All the pupils in the selected classrooms were given questionnaires and allowed to answer anonymously. This procedure was implemented for both males and females, ( they attend segregated schools ). In the case of the
universities, the sampling frame was according to the departmental lists. Departments in every university were listed and given numbers. The sampling unit, a classroom, was the same as in the schools and for the same reasons.

By sampling every individual in the study every classroom and every institution had an equal chance to be selected. Thus this procedure can be said to guarantee equality of selection allowing generalisations to be made about the study population generally.

The sampling procedure used three sampling techniques: stratified, systematic and multistage cluster sampling. For example, the desired number of pupils in the sample for this study was 2000. Since the usual number of pupils in every classroom was 30, the required number of schools was calculated to be four at each level and for each gender in each region. This made a total of 48 schools which supplied 120 pupils each, giving a total of 1440 pupils. Taking the schools as the population of the study they were listed and divided by the required number ie. 4, to obtain the sampling fraction. For example there are 51 high schools for males in the Riyadh region. 51 divided by 4 is 13, so taking the start point as 11 every thirteenth school after 11 was selected. For the universities one was chosen at random in each region, and then three departments were chosen using the same method as for the schools, and they were asked to supply 40 male and 40 female pupils. This gave a total of 18 institutions and 720 pupils. So the total of the sample population was 2160.

Once the school was selected, the sampling unit was one classroom in each school. All the classes in the school were listed and one of them was randomly selected. The same procedures were implemented for all the regions
and for both males and females. This procedure resulted in four secondary schools and four high schools which were randomly selected in each region. A classroom, usually thirty pupils, was drawn from each chosen school and the questionnaires were given to them and collected in the same day. Other groups were drawn from the universities in each chosen region. Departments in the selected universities were listed and three of them were randomly chosen and forty questionnaires were distributed in each selected department.

All the previous procedures were also implemented for the females in each region. Thus, the number of questionnaires given to the sample in each region for both sexes was 720, and the total number of questionnaires distributed to all subjects was 2160. The response rate was 85%, 1834 questionnaires.

Unfortunately the Central Education Authorities, for secondary and high schools, were not very helpful; they did not give the researcher permission to contact the schools, and left it to the discretion of the schools themselves. Some schools did not accept the questionnaires easily. One of them, in Riyadh Region, rejected the questionnaires altogether. Moreover, some classrooms in some schools had fewer pupils than expected.

In the case of the females great difficulties were expected, but fortunately these did not occur, except in the Jeddah Region. where a large amount of effort and time had been spent without great benefit. For example in spite of twenty days spent living in the area 78 questionnaires were returned from 360 distributed in Jeddah. The reason behind that would seem to be the lack of any relationship between the researcher and the local people in this region. Local connections had been the main method which helped the
researcher in the females survey in the other two regions, Riyadh and Dammam.

The questionnaire included twenty eight direct questions and twenty one Likert's scale statements. Direct questions assessed the relationship of the subjects with the mass media in general and the statements measured their attitudes towards drugs and drug abuse. All the returned questionnaires were analysed by SPSS (Statistical Package for Social Sciences)

Reliability and Validity

As said previously, this study is divided into two parts. Part one measures the contents of the newspapers, the selected magazine and selected television programmes in terms of drugs news and events, these are seen as indicators of the quantity and amount of coverage. In Part 1 there seems to be less of a problem with validity and reliability. The study intends to measure the news of drug incidents or the use of the drugs themselves. The term "DRUG" means any illegal substance which affects the brain and body of the person who uses it and is listed in the Police Department Of Drug Prevention in Saudi Arabia as a prohibited substance.

The concept will be clarified based on Saudi Arabian Law and schedule of drug definition. It is important to list all substances recognised as drugs in Saudi Arabia, the place of the study.

By looking through the newspapers, the magazine and the television programmes under the study any article mentioning the word "DRUG" or one of its named kinds, which has been listed, e.g. cocaine, directly or indirectly, will be counted as news related to drugs. So the word "DRUG" or one of its
kinds makes it separate from other concepts.

Measuring the mass media by this method can be said to be reliable provided that the definition of drug terms have not changed and the same substances are still listed as drugs. It is also valid because it measures what it intends to measure: the drugs or any substance listed on the drug schedule.

Part Two will measure the knowledge and the attitudes of Saudi Arabian pupils. If the pupils have negative attitudes towards drugs that means the coverage affected them.

In order to assess the reliability and validity of the attitude scale towards drugs a pilot study was carried out on a group of twenty four Saudi Arabian students at Loughborough University, whose attitudes towards drugs are already known to be negative; that is called known groups (Vaus, 1986). If they came out with negative attitudes, as expected, that meant the scale was as valid and, as one could expect measured what it intended to measure. If the result came out with positive or unclear attitudes that meant the scale was less valid. The pilot study was carried out three times. The first time the group were given a large number of statements, fifty two, and they were asked to state their agreements or disagreements for each statement. These statements were correlated. The statements which had low correlation with the others were omitted. For example, there was a statement saying that 'we should not have a relationship with countries which have high rate of drugs abuse'. The majority of the group did not agree with this statement. Two weeks later the same group were given the refined statements, and the result showed that there were few statements still not correlated with the rest of the scale. The statement which did not correlate with the rest of the scale statements were omitted. The
procedure in this stage resulted of 21 favourite and non-favourite statements. Three weeks later the third study took place on the same groups by the same 21 refined statements. The result showed that all these 21 statements were correlated to each other and gave negative attitudes toward drugs as I expected. So the scale at this stage contained only these 21 statements which correlated to each others and seemed to be valid in order to measure what it is supposed to measure.

As it was mentioned previously in this chapter the sample of the study is large and random. It was expected to contain many different groups of pupils, such as those who had tried drugs, who were using drugs, who knew drugs users and who did not. After the data collection it was found that the sample has included some of theses groups. The validity of the scale of attitudes was tested again. Comparison between theses groups took place. The result indicate that the respondents who had tried drugs, were using drugs and/or have had connection with drugs users have different result from those who are not, and have more positive attitudes towards drugs.

So, the questionnaire distinguished between two groups of drug users and non users, and between those who tried drugs and those who did not. Naturally, it was expected that the attitudes of the drug users would be less negative than the non users group, and those who tried drugs would show less negatively than those who did not. The result of the t-test demonstrates that the two groups of drug users and non users differ significantly with regard to their scores on the attitude scale, \( t(1816) = 5.49, P < .000 \) also, the two groups of
those who tried drugs and those who did not differ significantly from each other with regard to their scoring, $t(1821) = 6.35, P < .000$.

The result of the validity testing, the comparison between the respondents who have connection with drugs and those who do not, additionally with the procedure of a building of the scale of attitudes means that the scale is a valid one and measured that which it is suppose to have measured. Similarly, the high correlated results of the test-retest method, which took place during the procedure of the building of the scale shows that the 21 statements had consistent results in the three studies indicate that the scale can be considered as a reliable one. Additional to that the coefficient (with a Cronbach's Alpha = .796,) suggest that the scale can be said to be reliable.
CHAPTER THREE

Theoretical concepts
Theoretical Concepts

In any evaluative research, one of the most important elements is the theoretical concepts which underpins the research itself, (Hennigan, Flay & Haag, 1979). Examining theories or models on which the mass media preventative programmes are based shows how the treatment variable (input) leads to particular outcome variables. Every single mass media prevention programme is based, directly or indirectly, on a conceptual framework which explains the relationship between the input variables and the output variables. It also conceptualises and draws a picture of how the change process occurs step by step and how the causal chains occur, (Flay and Cook 1981). There are two major components of mass media evaluation research which should be given important consideration here: the methodological aspect and the theoretical aspect. The theoretical consideration is based on an assumption by the evaluator that the preventative programme being evaluated relies on a certain model for achieving its goals. Wallack, (1980) suggests that if the evaluator finds that the programme is not effective, then it might be that the model used was not accurate.

The majority of previous mass media prevention programmes have tried to change the behaviour target of the audience. As a result much of the previous evaluation research has considered assessing the receiver’s behaviour in an attempt to realize the programme’s effects. Virtually all mass media drug prevention programmes rely on a theory that a change in knowledge leads to a change in attitudes and that this will lead to a change in behaviour (Etzioni 1972, Braucht et al 1073, McGuire 1974, Robertson 1976, Kinder 1975,
However, a review of much of the literature indicates that a specific relationship between knowledge and attitudes does not always exist (Kinder 1975). In order to modify attitudes, we need a model which focuses on introducing and increasing the receiver's knowledge so that a change in attitudes will lead to a change in behaviour.

The Information-Processing model

The most appropriate theory to explain the impact of the mass media programmes on general attitude changes is the information-processing model (Flay 1981), which as stated earlier is often known as Yale or Hovland because it was developed by Hovland at Yale University in the USA. It is the most developed model of the communication process for explaining how persuasive communication occurs. This model was heavily studied by McGuire (1968-1978) and he designed his "persuasive matrix" for conceptualising knowledge, belief and attitude change through mass communication. (figure 1).

<table>
<thead>
<tr>
<th>Dependent Variables: Steps in Being Persuaded</th>
<th>Independents Variables: Communication Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Message, Presentation</td>
<td>Source</td>
</tr>
<tr>
<td>2) Attention</td>
<td>Exposure</td>
</tr>
<tr>
<td>3) Comprehension</td>
<td>Awareness</td>
</tr>
<tr>
<td>4) Yielding</td>
<td>Knowledge</td>
</tr>
<tr>
<td>5) Retention</td>
<td>Belief / Attitude</td>
</tr>
<tr>
<td>6) Action</td>
<td>Persistence / Maintenance</td>
</tr>
<tr>
<td></td>
<td>Behaviour</td>
</tr>
</tbody>
</table>
This matrix explains the complexity of the association between the input factors (the treatment) and the output variable, (Flay 1981). The columns in the matrix represent the input variables and the rows represent the output variables of the general attitude change. The input factors being the mass media communication or the independent variable consisting of message components which could manipulate the audience for persuasive communication (McGuire 1989). This analysis started by Lasswell (1948) can be summarised by: who says what, via which medium, to whom, and aimed at what kind of target (McGuire 1989).

Communication Factors

The information - processing model or the McGuire "persuasive matrix" consists of two major components of communication factors and change processes. The communication factors are source, message, channel, receivers and destination.

1- Source Factor

The source factor refers the apparent communicator to the message receivers. Numerous pieces of research have been carried out in order to look at how the communication impact can be affected by the kind of sources of information such as ethnicity, attraction and credibility. A source with high credibility among the target audience can induce a great change in their opinions. Bandy and President in 1983 stated that credibility variables, expertness, reliability, good will and trustworthiness could have more significant effects on the target audience. In another study, Atkin (1979) said
the sponsor of the persuasive communication could be seen as a source of the information. The credibility of the source of information differentiates one group from another. For the younger receiver, for instance, trust is the most important attribute in the credibility of the source of information, Atkin (1979). Similar attributes between the spokesperson and the message receivers also increase the likelihood of effectiveness. Atkin (1989) divided the sources of information into three basic categories in terms of their credibility. First, those who are regarded as an expert or a competent person; second those who are regarded by the receiver as trustworthy such as those who have similar characteristics to them; and finally those who appear to the audience as a dynamic spokesperson, exciting to the receivers such as a famous sportsperson or an attractive model, (Atkin 1981). Each of these kinds of sources of information is suitable for different situations and the sort of message addressed to a specific segment. The expert source of information for instance, is preferred when the target audience is intended to learn something complex or technical, while the trustworthy source is more likely to be effective when the persuasive message is to attempt to change the target audience attitudes or behaviour. The dynamic source is seen to be more effective and appropriate when the target of the message seems to be inattentive towards the message topic, (Atkin 1981). This is quite acceptable in my view. One of the most important factors in the communication process is the attention of the receiver to the topic. So, dynamic sources of information are required and needed when the audience is not paying full attention to the topic, and that could increase the likelihood of drawing their attention to the issue.
2- Message Factor

The second input factor (treatment) in the McGuire "persuasive matrix" of the information-processing model is the message factor. It is the information or the idea which is delivered by the source of information to the receivers, (Kline and Pavlik 1981). The message in the communication process provides the richest subcategories in the input factors such as its style of delivery, kinds of its appeals and so on, (McGuire 1989). These subcategories can also be divided into other subcategories. For example, the message style could include some factors such as speed of speech and humour. Usually, there are some factors which interfere and distort the actual meaning of the message which the communicator is trying to deliver to the receivers, (Kline and Pavlik 1981). Some of these factors pertain to the complexity of the message, while some refer to the receivers themselves. Much research into communication advocates a simple message which is repeated frequently and consistently, (McGuire 1974; Kline and Pavlik 1981). Some attributes of a message increase the likelihood of the receiver's acquisition of information and gaining knowledge, such as a message which discusses and provides personal and taboo issues. Entertainment during the communication seems to be one of the most important elements for attracting the receiver's attention to attend to and comprehend the message. The appeal of the message is regarded to be another important factor, particularly in a persuasive communication which aims to change attitude and behaviour, (Atkin 1979). An emotional appeal is suitable for influencing and activating those who are already convinced, while a rational and logical appeal is more suitable for intelligent, educated and sophisticated receivers, (Atkin 1979). In some studies (Hanneman, McEwen and Coyne
arousing fear is seen to be appropriate especially with health messages. It can generally be more effective than a message with mild threats. However, in the case of drug use and adolescents, high levels of fear appeals have not demonstrated such success, (Atkin 1997).

For a persuasive message a one-sided argument which only supports the conclusion of the message seems to be more effective for ordinary people. However, if the receivers are well educated and highly sophisticated then a two-sided message seems to be superior.

With regard to the style of the message, this is important for attracting the receivers attention to the topic. A dull or complex presentation is regarded as an obstacle to understanding the message rather than an attraction, while an exciting, dramatic and understandable style is highly recommended (Funkhouser and Maccoby 1973;). When the message is targeted at young people, especially in drug prevention, selecting a special topic seems to be important. In the study by Dembo et al (1970) assessing attitudes towards drugs he found that the pupils wanted to know specific information such as the effects of drugs taking on the brain and the body, legal penalties, treatment of the drug experience and so on, (Bandy et al 1983). Specific information in drugs prevention enables the communicator to cover the topic which he is discussing with more details and to provide more valuable information in my view. It also gives more trust for the source among his target audience and creates his credibility among them.

3- Channel Factor

The third factor in the communication process model of the McGuire
matrix is the channel factor. It refers to the medium by which the message is delivered. It is the vehicle that transmits the information from the source to the target audience. In some situations, the source and the channel factors can be the same, while with mass media communications they are separate from each other, (Kline and Pavlik 1981).

The mass media varies in the way it provides advantages and disadvantages. The electronic media, radio and television, provide a quick simple message which is often effective. In contrast the print media, magazines and newspapers, provide detailed messages which can be read again and again. For adolescents in western countries the radio and print media seem to be more convenient, simply because they can carry these around with them; this is more difficult in the case of television, (Schramm 1977). Another advantage of the mass media in general is its availability; it can impose information even when people try to avoid it. Information is then acquired both actively and passively, (Ray 1973).

Some studies by Morrison, Kline and Miller (1974), have characterised media environments. They suggested that film, pamphlet, book and magazine seem to have a high level of "informativeness", while radio has a low level. Media such as television and newspapers tend to fall in the middle. Other studies have suggested different functions for different media. Radio, for instance, in the USA is used as a form of companionship, while television networks substantially provide entertainment with relatively few educational programmes, (Greenberg 1974 and Greenberg et al., 1979).

In Europe, there are other differences. Most of the programme producers emphasise the educational aspect, (Kline and Pavlik 1981). In both USA and
Europe, particularly England, the print media, magazine and newspapers, focus more on public affairs, than the broadcasting media, (Kline and Pavlik 1981).

Among British teenagers the use of television and radio have increased dramatically in the last decade, (Greenberg 1976) and similarly in the USA. (Comstock, G.; Chaffee, S.; Katzman, N. et al 1978) For the use of newspapers, Atkin and Elwood (1978) reported that in contrast to the increase in watching television, newspaper reading has gone down. However, the qualitative differences between the channels is clear. Adolescents may recall a simple message from television, but they can recall complex long term effective information from the print, (Weiss 1972). This was supported by Chaiken and Eagly (1976). They suggested that when the message is complex, comprehensive and persuasive, the print media seems to be better, while when the message is simple and more persuasive, then electronic media seem to work better.

In general, the most effective medium in the developed countries is television, followed by newspapers. But a combination of all mass media may be the most effective of all.

4.- Receiver Factor

In mass media prevention programmes the characteristics of the target audience who are to receive the message pose considerable interest for the communicator. These include what can be called capacity variables, i.e. age, education levels and demography, such as gender and ethnicity, (Eagly 1981; McGuire 1985; Wells 1975) The early theories of mass communication considered the message receivers as an easy target to be hit by the information
and readily directed a well prepared message towards them. However, that view has been changed and the attributes of the receivers are now considered by many of the programme planners as a major factor in a successful programme, (Atkin 1979). Health programmes which do not consider their target receivers, their characteristics and their information needs, could have their messages ignored or misunderstood depending on the prior knowledge, attitudes and interest of the receivers. (Klapper 1960; Bauer 1971; Roberts and Maccoby 1974; P. Wright 1975) In many successful programmes dividing the whole audience into subgroups with similar attributes and designing convenient messages on that basis seems to be an appropriate strategy. With drug prevention programmes undirected messages to specific groups seem to work better than the directed messages to identified groups. (Hanneman and McEwen 1973). The social context factors of the message receivers must also be taken into account. Messages which attack or conflict with society’s values and traditions should not be addressed to them.

Credibility of the source of information, the kind of message, and the channel used must, therefore, depend on the characteristics of the message receivers. In the case of adolescents, physical and developmental dimensions are the most salient mediating factors, (Kline and Pavlik 1981). In a study by Kline (1978) he found that female adolescents acquired different information from male adolescents, such as family planning information.

5 - Destination Factor

The fifth and the final input factor of the information processing model in the McGuire matrix is the target attitudes and alternative behaviour which
the message advocates and desires to modify. What we can call the destination.

This destination includes many other sub-factors, such as long term, not immediate, change, and the specific versus the whole ideology system. It also includes changing an existing belief or creating a new one, (McGuire 1989). Studies in persuasive communication indicate that the message which creates immediate change may be less effective in the long run, (Cook, Gruder, Hennigan and Flay 1979; Evans, Rozelle, Lasater, Dembroski and Allen 1970).

Formative research may be useful for specifying which particular behaviour is most influential, (Atkin 1989).

For evaluative research on mass media prevention programmes each of the above input variables should be given attention by the evaluator, (Flay and Schlegel 1980).

The Change Process

In the information-processing model there are six stages of general attitude change. They have been assigned by the McGuire matrix as the outcome variables (figure 1) to conceptualise how the change process developed. The six steps in the McGuire matrix are:

1)- being presented with the persuasive messages (Exposure)
2)- attending to the message (awareness)
3)- comprehension of contents (knowledge)
4)- yielding to its appeals (belief / attitude)
5)- retaining this new position (persistence of attitude change)
6)- acting on the basis of it (behaviour).

The information-processing model operates on the assumption that
change in knowledge and belief (cognitive change) will lead to change of attitude (affective change) and that automatically will lead to change in behaviour (conative) change. (McGuire 1989; Flay B., DiTecco D. and Schlegel 1981; Flay 1981). However, a different order of change is possible among cognitive, affective and conative (Ostrom 1969, Rosenberg and Hovland 1946).

The variables of the general attitude to change presented by the McGuire matrix are:

1- Presentation of the message (Exposure)

The main aim at this stage of the communication process is the change of knowledge. It is expected for it to be possible to change the awareness of people towards a certain objective providing that they can be exposed to the message, (Flay and Schlegel 1980). In many of the mass media programmes assessment of impact evaluation, has been given very little attention by the evaluators and may have been sometimes ignored. However, many health promotions have failed simply because their target audience did not watch, listen and/or read them; in other words the programmes did not reach their target audience, (Hyman et al 1947,). For achieving this important step i.e. reaching the target audience, it seems the message should be delivered via a popular medium during a peak time of watching and listening. Many preventative programmes have failed to reach their target audience because of their unpopular timing such as many of the public service announcements in the USA, for instance, (Flay 1981; Flay and Sobel 1983). Obviously the mass media programmes which do not even reach their target audience can not affect
them in any way.

Repetition of the programmes is one of the most important factors which gives the audience a chance to be exposed to the programmes. Advisers believe that the average number of times a receiver’s exposure is needed to affect their behaviour of purchase is three. (Hersey et al 1982). However, influencing health behaviour probably takes much more exposure. (Flay and Sobel 1983)

2- Attention and Comprehension

Although exposure to the message is an important step in the general attitude change, it is not enough to guarantee that the receivers fully understood the information of the communication message. Thus, the target audience must be motivated to attend and comprehend the message in order to change their knowledge. This is the second step in the change process according to the McGuire "persuasive matrix". The message must be repeated many times to ensure receiver comprehension, (Flay 1981). The most important feature of the communication message is its attraction of the receiver’s attention, which increases the likelihood of understanding the information. With regard to the significance of receivers understanding the message and its impact on the change process, Chaiken and Eagly (1976) conducted a study to prove which kind of medium is more suitable. They exposed their subjects to two kinds of messages: one was easy and the second was more difficult to understand. With the easy message the persuasion was greater when the message was presented by videotape. With the difficult message, comprehension and persuasion were greater when the message was written.
The problem here appears to be which kind of exposure the audience selects. They can make a decision to throw away the newspaper or to watch a different programme. For that reason, the basic techniques used by advisers is to entertain or to shock the receivers in order to attract their attention to the messages, (Flay 1981). According to the McGuire Matrix, the above steps could ensure the target audiences’ awareness and knowledge about the issue being presented, and based on the assumption of the McGuire theory about the change process (change in knowledge leads to change in attitudes), attention is drawn to the next step.

3 - Yielding and Retention

In both the areas of social psychology and communication research, belief and attitude change have been studied. The findings of these studies are confusing and sometimes conflicting. However, that confusion has been reduced somewhat since McGuire reviewed the area, (Flay 1981). There is some confusion in the studies on the definition of a belief and an attitude, and most of them do not differentiate between them. Flay (1981) distinguished between knowledge and belief, but not between belief and attitude. He defined belief as a certain degree to which one subjectively accepts the association between the behaviour and some consequences. But that cannot be argued in the mass media case. Not every message or information being presented is regarded by the receivers as a fact even though it is possible to believe it or not. Attitudes seem to be deeper set than beliefs.

The definition of belief is suggested here to be an acceptance of information as a fact, but not necessarily adopting and supporting that fact.
Attitude is more a personal feeling supporting or not supporting, liking or disliking that fact. In other words knowledge is the information presented, belief is accepting that piece of information as a fact or not, and attitude is adopting and supporting that fact. That is not to say believing the information (knowledge) involves a change in attitude, but it is a step that could lead to change. Once, the knowledge and belief have changed, it is assumed that attitude will change automatically according to the information-processing model explanation.

At this stage of changing attitude, however, a problem arises. Changes in attitude must be stable for a long time to be meaningful, (McGuire 1989). Some studies (Hass and Mann 1976, Nuttin 1975) reported that changes in attitude were merely a response to the demand of certain situations but not a really meaningful change. Reviews of the literature by Flay and Schlegel (1980) enable the following summary of the conditions which are conducive to meaningful change in attitude for a long time as:

1) The persuasive message should come from more than one credible source.
2) The message should be repeated many times and consistently.
3) It should be presented through more than one available medium.
4) It should be combined with a high level of personal involvement, and consistency with related attitude and value structures.

4 Action (Behaviour)

The final step of the information-processing model explaining the general attitude change, is the change in behaviour. It is assumed that the target
audience whose knowledge, belief and attitude has been changed will behave on the basis of that attitude. The reviews in the area indicate that meaningful change in behaviour is much less than any change in belief and attitudes. (Flay and Schlegel 1980)

In Summary The Yale approach, or the information-processing model which has been summarised by the McGuire "persuasive matrix", draws a picture and conceptualises how the general change in attitudes occurs and which steps are necessary for that change. For change in attitude and behaviour of some groups to occur, for example, their knowledge must be changed by exposing them to information about the issue. Having exposed them they must be motivated to attend and comprehend. As a result of that their beliefs will be changed, and then they will be expected to behave on the basis of that attitude.

Based on the information-processing model of the communication process Flay and Schlegel 1980, have developed another suggestion to conceptualise the general attitude of change as in (figure 2).
This can be summarised as:

1)- Exposure will lead to awareness providing that the receivers attend to it.

2)- Awareness will lead to change in knowledge, only when the message is comprehended.

3)- Change in knowledge will lead to change in belief, but only if the arguments or conclusion of the message are accepted or yielded to.

4)- Change in belief might lead to change in attitude, and that automatically will lead to change in behaviour.

However, the information-processing model seems to exclude or ignore some other important factors. The social context of the message receivers is not explained by the model. Mass media programmes which conflict with the values or traditions of the society of the target audience are very likely to have little effect or no effect at all. Personal communication could both contend with or support the mass media programme message to be more influential. Atkin (1981) & Flay and Schlegel (1980) all stated that the information-processing model and the McGuire "persuasive matrix" exclude two important factors. Firstly, there is the environment in which the message is received, and secondly there are opportunities to give expression to the newly formed attitude, and ongoing reinforcement for doing so, (Flay 1981.)

Another problem with the information-processing model lies with its assumption that increasing knowledge about a certain issue in order to change attitude will lead to behaviour change. However, this order of change (knowledge-attitude-behaviour) presented by the information-processing model
is not the only possible one, (Flay and Schlegel 1980; Flay 1981; Ray 1973; Kline and Pavlik 1981). In some cases change in knowledge and belief (cognitive change) could lead directly to behaviour change, (Flay 1981). For example, in the case of low involvement with the issue and few variations between the alternatives of behaviour choices, change in knowledge will lead directly to change in behaviour and that behavioural experience will create certain attitudes towards the subject. This order of change (knowledge-behaviour-attitude) is called the low-involvement hierarchy; and is usually applied to consumer behaviour, (Flay 1981). In the case of high involvement in the issue but few variations between the behaviour alternatives, behaviour change is likely to lead to attitude change (affective change), and that is known as the dissonance-attribution hierarchy. In the case of high involvement in the issue and big differences between alternative actions, change in knowledge and belief is likely to occur first, then attitude will be changed and that will lead to behaviour change. That order of change is known as the learning hierarchy which matches with the information-processing model order of general attitude change process.

Another suggestion to explain how the communication process occurs is put forward by Kline and Pavlik (1980). In their paper they stated that the communication process is not always perfect and complete. Sometimes the source of information, for instance, does not say what it wants or wishes to say and even though it says most of it, it can not control and complete the communication process, by sufficiency of exposure, attention and comprehension by the target audience of the messages. For their model they draw a diagram to explain how the communication can be conceptualized. (Figure 3)
In figure (3) each circle represents one of the communication factors, source, message encoded, channel, receivers, and message decoded. The shaded area of each circle illustrates where the communication is complete and probably perfect. The non shaded area of the each circle represents weakness and non control of the communication process. When there is large shaded area in the circles that illustrates the success of the communication. For example, when there is a large shaded area in circle (A) that means the source of information succeeded in his delivery and managed to control most factors in this variable. However, when there is a large non shaded area in the circle that means this step in that communication variable is not controlled and suffers from a weakness in it.

Despite the inadequacy of the information-processing model of some factors such as social context for instance, I believe that it is the most convenient model for mass media promotion programmes, (Flay 1981). In health promotion, the differences between the behavioural alternative seem to be very clear such as quitting or continuing to smoke or take drugs. The environment surrounding health issues is usually at a high level of significance.
for all people.

Apart from the theoretical consideration discussed above, and to the best of my knowledge, there does not seem to be another model to explain the communication process and changes in knowledge and attitudes. Because of this and because this study is an evaluative one, the information-processing model has been adopted as the best model of evaluating the Saudi Arabian newspapers coverage of the drugs issue.

Implications of an evaluation of the impact of the mass media

The information-processing model indicates that to be effective a media prevention programme should meet all the steps and conditions presented in the McGuire "persuasive matrix", (Flay and Schlegel 1980).

Similarly, for an accurate evaluative research assessing the impact of the mass media, it is essential to examine all the steps in the "persuasive matrix" to give an accurate estimation of the general attitude change process at every stage, (Flay and Schlegel 1980, McGuire 1989). The objective of any health promotion is to change, or to prevent people from becoming involved in a bad health situation. Much evaluative research reports that the programmes which have been evaluated were not effective. Thus they measured the main objective of the programmes which was usually behaviour, but did not examine the steps in the information processing model, (Flay 1981). They did not recognize the cause of the programmes’ failure, simply because they did not measure the stages in the model. So, whilst their evaluation may have answered whether the programmes were effective or not, it did not answer why. Did they fail because their target audience were not exposed to the programme’s messages, because

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they were not motivated to attend, comprehend and understand the programme’s messages, or because they did not believe the messages. The failure of the programmes could be in any of these steps. An evaluation of the main aim of a prevention programme could answer whether the programme was effective or not, but it could not answer why it was not effective without examining the above mentioned steps in the information-processing model, (Flay and Best 1982). The information-processing model enables the evaluator to discover why some mass media prevention programmes failed. It is a useful checklist for assessing the change process from the beginning to the end of the McGuire "persuasive matrix" steps. The ideal evaluation research should answer all the questions stated above by examining whether the programme’s messages reached its audience, whether they gained knowledge from it, if they believed in it and whether their attitudes changed because of it.

In the case of this study an evaluation of the impact of the Saudi Arabian national drugs campaign on the Saudi Arabian pupils’ attitudes will be based on the information-processing model.
CHAPTER FOUR

The previous studies in the field
Previous Studies

The role of the mass media is currently receiving considerable attention if only because it is capable of reaching a large audience. One of the most important usages is that of substance abuse prevention. For many professionals and decision makers, the possibility of using the mass media for the prevention of drug abuse seems attractive.

In many developed countries using the mass media for teaching about drug abuse has been commonplace for a relatively long time. In the United States for example, Public Service Announcements and some other organisations have conducted many such campaigns for drug abuse prevention.

However, the effectiveness of mass media educational programming about drug abuse is not altogether clear. This review of the literature is intended to give a representative picture of the present state of the influence and impact of mass media or drug prevention programmes. The review has been restricted to evaluating the studies of mass media drug prevention programmes. Although an exception has been made to include certain educational prevention programmes such as those in schools and by parents. They have only been included when they shared the same campaign.

The data for this review was gathered by sifting from the bibliographic sources in sociology, social-psychology, health education, and communication. An online search was carried out by database line in the Loughborough University Library. Finally, the researcher personally visited some specialist organisations about drug prevention such as The Institute for the Study of Drug Dependence in London to collect some additional materials.
Evaluative researches

Generally, data on the impact of the mass media on the prevention of drug abuse is confused and sometimes conflicting. Many studies suggest that the mass media have minimal effect on the area of drug abuse prevention or no effect at all, while other studies report the opposite point of view. The data presented here is divided into two major categories: those who see the mass media as effective tools for drug abuse prevention and those who do not.

Studies showing little media impact

Many evaluative researches have been conducted but their results are generally disappointing with regard to the effects of the mass media on the prevention of drug abuse. Capalaces and Starr (1973) studied five years of Public Service Announcements (PSAs) in USA concerning drug abuse prevention. They reported that PSAs used fear appeals and created anxiety. They concluded that the announcements were not effective overall because the fear appeals were not related to the receiver's reality. Another problem they found was that not only was the target audience of the messages not identified, but also the appropriate audiences were not exposed to the PSA messages. (Capalaces and Starr 1973). In this study there are some problems in my view, particularly with the prevention programme being evaluated. We have seen in the previous chapter on the information processing model the significance of the sufficiency of the exposure to the preventative messages for achieving a good result. The announcements at the time of the study seemed to suffer from that problem, because the appropriate audience was not exposed to the messages. The result
of that study indicates that there was not enough exposure to the messages. Another problem with that particular programme was in presenting unrealistic information with a high level of threat to the audience. When audiences are knowledgeable or experienced and the mass media presents different information about it, its credibility among them seems to be low.

A study of the sources of information about drugs among college students was conducted by Hanneman (1973). In this study he found that the mass media had less impact than that of a trustworthy, personal informed source. However, he found that the mass media were among the most important sources of information about drugs for those who did not use them. He analysed the content of the television programmes about drugs and found only 37 minutes out of 500 hours were about the abuse of drugs. Also he found that 80% of the material did not have factual information about drugs, and most of it was put out at unpopular times. Based on his results, he concluded that the Public Service Announcement messages had little effect especially on high risk groups. He attributed that to the nonspecific information and timing of broadcasting the messages, (Hanneman 1973). This programme also suffers from lack of sufficiency of exposure to the messages. Most of the programme materials were sent out at unpopular times. It also suffers from lack of specific information about drugs. That did not encourage the receivers to attend to its materials.

Smart and Fejer (1974) studied the impact of the drug abuse prevention programmes. The messages of the programme consisted of both high level and low level fear appeals. In the first phase of their study they presented a different level of threatening messages to a random sample of school pupils in
grades 9, 11, and 13. Their data indicated that there was no association between intention and anxiety level. In the second phase they exposed the students to messages about unknown kinds of drug called M.O.T. Their finding suggested that the variation in level of fear appeals had an influence on the impact of the mass media messages. The messages with high level of fear appeals were far superior to messages with low fear appeals. They stated that, when the drug is new and unknown by the receivers, the messages with high fear appeals seem to work better. Their general conclusion was that the anti-marijuana programmes had little impact on the high school pupils under study, (Smart and Fejer 1974). The result of that study adds great significance for using realistic information with fear appeals. We have seen in the second phase of that study when the fear appeals worked better. That in my view is because the information provided was new to the receivers. When they presented a new kind of drug, which the audience did not have any idea about, they believed the messages and the information provided.

Ray and Ward (1976) conducted an elaborate three-study design. They presented three anti-drug programmes to certain audiences and under certain conditions in order to determine their effects on the receivers. The study design included controlled laboratory sessions and some other field sessions. In the first phase of the study for the evaluation of the impact of the television messages, the researcher distributed questionnaires pre and post programme presentation to pupils and parents. In the second and third phase they included other adults. They examined data on recalling the programme information and interest in the presentation and they then assessed the various attitudes towards drugs. Their general conclusion indicated that, many older teenagers appeared
not to accept the messages of the television drugs prevention programmes, (Ray and Ward 1976). In my view that probably attributed to the difference between the nature of their target audience. In their study they designed a message to pupils and parents in the same time. However, it was clear from other studies that the message which suits young people might not be good for older people. The nature of the message in that study was not clear, whether it was aimed at young or old receivers.

Another study was carried out by Feingold and Knapp (1977) in a laboratory-style design. They examined three variables in a series of 60 minute anti-drug commercials. They assessed the effect of high fear appeals versus low fear appeals, explicit conclusions versus implicit conclusions, and presentation of monologue versus presentation of dialogue. They evaluated the attitude of the study subjects on Likert’s Scale by twenty-five statements before and after viewing the programmes. Their findings indicated that the high level of fear appeals did not have more effect than the low fear appeals, but the explicit conclusions were more effective than the implicit conclusions. Messages presented in dialogue were more effective than messages presented in monologue format. However overall, they concluded that the anti drug programmes were not effective, (Feingold and Knapp 1977). With regard to the failure of the high fear appeals to have great effect, that can be attributed to the nature of the society in my opinion and its relationship and knowledge about drugs. The study was also carried out in a laboratory which was far removed from the real world and this seem to have an effect on the failure or success any prevention programmes.

In 1977 Hanneman examined the Public Service Announcement
campaign against drug abuse in the USA which was broadcast through television and radio. The campaign was designed to prevent psychoactive drug abuse by adult females. He evaluated the impact of the campaign by assessing the attitudes and behaviour of the message receivers. His findings suggested that there was little change in the respondents attitude and behaviour, \textit{(Hanneman 1977)}. There is little to say about this study, in my opinion. The researcher did not say anything about the target audience exposure to the messages. He just mentioned the little effect of these announcement, but we do not know whether that was caused by the lack of exposure, as the lack of interest or something to do with the message themselves.

A more recent study was carried out by \textit{Barber and Grichting (1990)} in Australia evaluated the national mass media campaign against drug abuse. The federal government of Australia had launched a 3 year national campaign to educate the population in order to reducing drug usage via many television channels. The mass media strategy was concentrated in the first three months of the campaign. The researchers tried to assess the impact of the mass media campaign on public awareness and their attitudes toward drugs. They relied on a quasi-experimental design "pre-post test". The result of their evaluation indicated that the mass media campaign against drugs had some effect on the population attitudes, particularly about drug abuse but had little or no effect concerning other substances such as alcohol, \textit{(Barber and Grichting 1990)}. This is due, in my opinion, to the availability of information about drugs in the society and interference of other issues. For example beside the preventative drug programmes there was a lot of commercial advertising about alcohol on the television and other media. And that reduced the impact of the preventative
The American Government had launched a multi-million dollars campaign against drugs in the 1980s called "Just Say No" campaign. The campaign started under Ronald Reagan's administration, and was hosted by the first lady Mrs Reagan; indeed it was known as her crusade against drugs (Reinarman et al 1989). The campaign was aimed at the students in junior high schools and their parents. Its aim was to present a drug free healthy society, and to reinforce attitudes against drug use and abuse. It used a slogan of "Just Say No" to be repeated and expressed to anybody offering drugs. The campaign messages were promoted by public services announcements via television, radio, video music, press advertising, posters and leaflets. Although the "Just Say No" campaign appeared as a slogan it was a movement and carried a concept of persuasion not to use drugs for those who believed drugs were safe and acceptable. Reviewing this particular campaign was not an easy task due to the shortage of materials about it. However there are few short articles about the "Just Say No" campaign.

As usual with drug education in America there were a lot of debates about the "Just Say No" campaign. In their article (Forman and Lachter 1989) indicated that the campaign presented credible useful information in a factual manner to its target audience. They also claimed that the campaign dealt with all kinds of drugs without exception, but that is not exactly true. The campaign ignored the most consumed drugs by the American teenager, alcohol and nicotine, (Strasburger 1989). The reach of the campaign messages was large and it reached millions of people. The slogan of the campaign, "Just Say No" had
become the national rallying cry for drugs prevention. (Forman & Lachter 1989) and the response to the campaign messages was favourable and accepted. However, that has not been proved by scientific data or evaluation of the campaign. Also the campaign was still running while they were writing their article. They said that "the success" of the campaign could have come from providing credible factual information about drugs. However, in my view, it is clear from other studies in this literature that providing information alone is not enough to change drug abuse behaviour. The American "Just Say No" campaign has not been evaluated with regard to its outcome and its effectiveness (Kim, et al 1989). In my opinion, evaluating the impact of such a campaign was not feasible for several reasons. First, the American society has a long history of public education about drugs. So, assuming that there was a reduction in drug use, it was impossible to attribute it to the "Just Say No" campaign alone. Second the campaign had no control groups which did not receive the message, so their knowledge and attitudes could not be compared with those who received the message.

The "Just Say No" campaign was merely a dream to solve a very complex social and human behavioural problem by a quick and simple attempt (Strasburger 1989). In his article (Strasburger) accurately addressed many logical problems with the "Just Say No" campaign in my opinion. First, and the most important in my opinion, the campaign was not based on scientific facts. It is perfectly known that the drug use and abuse is the cause of many social complexes in family, peer, community and media, and individual psychology. So, solving such complicated problems by repeating a slogan does not work. Although there was no scientific research to evaluate the campaign.
effectiveness, there were a few informal surveys. They provided some
documentation which indicated that some subgroups, particularly teenagers,
may not buy such an approach. Another problem with the campaign lies in its
targeting strategy. The campaign’s main target audience was teenagers; but
which teenagers was not shown by ethnicity, age, or social background, and
that is an important issue particularly in USA in my view. For example, a
programme which works for teenagers aged 10 to 15 years old may not work
for older, 17 to 20’s, and what is good for males may not be good for females.
The "Just Say No" campaign did not work out that issue properly but was a
one dimensional programme intended to include everyone and every thing. The
campaign also ignored the adolescent psychology. At this age many teenagers
dislike being told what to do. The "Just Say No" campaign probably was seen
an insult to some of them, especially the intelligent teenagers. (Strasburger)
The campaign implied that they lacked an identity of their own and that the
campaigners knew what was best for them. That is the most important point
to be considered in dealing with adolescents in my view.
The credibility of the source presenting the information about drugs did not
seem to be high. The campaign used headlines by sport’s celebrities to warn
against drugs abuse. At the same time most teenagers knew such celebrities
were also abusers of drugs. Indeed some of those who captured the campaign
headline had died from abusing drugs, (Strasburger 1989). Some of them too
had been suspended from sport events because of the drug abuse. Also
celebrities who played parts in the campaign delivered contradictory messages.
Most of them were also in advertisement for beers and wine. And I think it is
not logical to believe that adolescents will believe two contradictory messages
from one source at the same time. Teenagers spend a long time watching television and listening to the radio. They read and see commercials about alcohol and cigarettes given by celebrities who told them not to use drugs. It was naive to believe that the teenagers and adolescents would believe advice about drugs from somebody who was also abusing them.

Another problem with the "Just Say No" campaign was that it relied on fear appeals. In many studies fear appeals did not always work as well as persuasion. In the study by (Strasburger, 1989) he suggested the opposite might happen: i.e. that using fear could increase the use of drugs instead of decreasing them. He said that is what may have happened in the "Just Say No" campaign. I do not share that view. In some societies where there is no better knowledge about drugs that may be so, but in American society with a long history of drugs education, it is doubtful if that will affect them. They know already from many sources about the effect of drugs, from friends, schools, relatives and the mass media. Telling them about drugs will not add anything to increase their use of drugs in my view.

An estimated $600 million was spent in the "Just Say No" campaign with uncertain benefit. The money which was spent there could had been used to support families with low income who have children at high risk of involvement in drugs.

The British Government, Department of Health, launched a wide ranging mass media campaign in 1985 the aim of which was to prevent misuse of drugs. The data on that campaign is very limited. The Institute for Study of Drug Dependency and the Home office were both asked about the campaign but
they had no data about that campaign. The main objective of the campaign was to reduce interest in drug use. Heroin was the most concerned substance. The campaign involved television commercials, press advertising and outdoor posters. The newspapers and the outdoor poster relied heavily on illustrations and photographic representation aimed at creating bad image of drug users. It used terms which were terse: i.e. *heroin screws you up, heroin messes you up, ruins your life*...etc. The main target audience of the campaign was young people who were thought to be "at risk" aged from 13 to 20 years old. However, there was a secondary target group of young people who were believed to be less "at risk", parents, professionals such as GPs, teachers and social workers.

A quantitative study was undertaken about five months after the campaign, by MESSRS RBL Ltd. The aim of which was to investigate and evaluate the effectiveness of the campaign on the whole target audience’s attitudes, belief and behaviour, and whether it had changed since 1984 or not.

The main finding of the study indicated that the campaign had achieved a wide range of coverage. It also appeared that the awareness and recognition of the press and poster messages was high among the young people. Most of the sample displayed a high percentage of recognition of most of the press and poster messages. As a result of the campaign the study reported an improvement in the target audience knowledge and awareness. They were aware of the symptoms of using heroin, and the high risk of even trying it. There was also an increase in believing that death is the inevitable consequence of continuing heroin usage. The sample also demonstrate an increase in the likelihood of rejecting offers by friends to use heroin. The overall conclusion
was that the campaign had significant effects on the target attitudes and beliefs about heroin. Despite the wide coverage and awareness of the campaign among parents its effectiveness was rather smaller in this group than among young people.

Another qualitative research regarding this campaign was carried out by Andrew Iving & Associates six months after the campaign. It had similar objectives to the previous study, i.e. an assessment and evaluation of the campaign effectiveness. It emphasised the level of attitude change, exposure to the campaign and recall of its materials.

Unlike the first research, the sample was weighted towards the targets who were thought to be "at risk" and known heroin users in areas where drugs were thought to be widespread. The areas of the sample were drawn from Greater London, Liverpool \ Wirral, Manchester and Bristol.

The main finding of the study indicated that in the Wirral area drug misuse was probably declining, while it is still growing in Bristol. However it can be said that across the whole sample there were signs of decrease in interest in drugs. It was also clear that the effects of the campaign on young people who were "at risk" was noticeable. Recall of the campaign messages materials was high and detailed among the sample. Most of the sample were able to recall messages such as "heroin screws you up", "messes you up", "ruins you life", etc. Overall the main goals of the campaign to reinforce young people’s resistance to heroin use and to discourage their interest in drug was to a large extent achieved. Target belief of the campaign across all subgroups of the sample of the young people showed the campaign messages to be received as favourable, true and credible information.
Despite the fact that these two research projects have indicated that the Governmental campaign was effective, it appeared that there were some problems. The effectiveness of the campaign was only on the attitudes of young people who were thought to be "at risk". In this respect it might have had some positive influence. However, for those were already abusing drugs the campaign did nothing. It may even have made it worse for them by giving them more information about where to obtain drugs. The campaign may also have made it worse because it gave a bad image about drug users. Some of the sample in the second research study reported a depressing view of the campaign. But that was to be expected with most drug prevention campaigns whether here or elsewhere produced similar result. The campaign may have also demoralised existing drug users by giving them a negative image and created the impression of a society as hostile towards them. For example in the second study it was noticeable that in the Wirral area where heroin was most frequently used, the local people were most hostile to heroin users. Moreover, because the campaign concentrated on heroin it could be implied that other drugs were not as dangerous. Another problem with the campaign was its target audience. The campaign had more than one kind of target group. It differed in terms of age, level of education and probably experience with drugs. The result from other studies show it is perfectly clear that a message which is good enough for parents might not suit children. This campaign did not distinguish between these groups. Although the effectiveness of the campaign could be established, it could not be guaranteed to have positive long term effects. It is well known that the mass media is a major source of information among young people, but they are not the only influential source in society. Young people are
also influenced by their parents, friends and the older generation. However, even they have been influenced temporarily they will probably forget the campaign soon after.

There has been enormous effort and hard searching for materials related to President Nixon's covert campaign on drugs in the 1970s in the areas of mass communication, media study and drug prevention. The search was carried out in the Loughborough University library and other drug specialist libraries such as I.S.D.D. in London, but there were no materials related to this campaign in the social sciences and mass communication disciplines. However another search under the keyword "politics" resulted in some materials in Nixon's politics including his secret war against heroin in the 1970s. None of the studies look at the campaign's effectiveness or the knowledge about drugs or even about drugs abuse reduction. They discuss it from a political point of view. They show how President Nixon used this to attempt to get control over the American Government. The literature indicates that there was a "war against drugs" at that time under the Nixon administration but there was no evaluation of its result with regard to its effectiveness. Most of the literature discussed the agencies which were created to be responsible about drugs at that time and the corruption and fear they introduced in their search for drugs. It shows that when Nixon came to power he created a new national crisis which could not be handled by the traditional agencies such as FBI or CIA. or be adopted and accepted by the public, Congress, the Court, and the mass media. The crisis he came up with was "Heroin Epidemic". Since then many firms and individuals such as police, judges, doctors, social workers and community
leaders have been concerned with the spread of heroin addiction. They raised anxiety among the American middle class about deterioration of life about increased crime and police corruption. Based on that fear Nixon and his men launched a massive war on drugs by creating new law enforcement agencies such as ONNI, ODAL, and DEA. These agencies reported directly to the Nixon administration and bypassed the traditional ones. So used in this way the war on drugs was a perfect cover for the President. Some television producers were encouraged to hold anti-drugs conferences in the White House. However, in the late 1970s the drugs war gradually faded away, and the "Heroin Epidemic" was over. In fact, results show there was no drop in heroin addiction.

Reading between the lines of the available literature about this secret campaign shows no results were achieved with regard to knowledge increase and attitudes towards drugs among the Americans. For example, in his book Epstein, E. (1990) questioned the supervisor in the Nixon war on drugs Mr. Ehrlichman who will be remembered later for the Watergate scandal. He was asked why the Reagan-Bush campaign against cocaine had achieved few results. The answer was that "they did not try to learn from our mistakes".

As has been mentioned before there had been no scientific evaluation of the Nixon campaign against drugs there are no indirect indications of the effectiveness of the campaign with regard to drugs abuse. Additionally it was called "covert", and that of course makes it even more difficult to evaluate. All the literatures and studies in this review have some link to the main objectives of this study which is the effectiveness of the Saudi Arabian newspapers campaign on the pupils's knowledge and attitudes toward drugs.
Some of the studies discussed in the literature used different methods or even media and target audiences from the Saudi Arabian one; but they have similarities with regard to their goals which were to increase knowledge and change attitudes about drugs. However, Nixon’s campaign had less relevance to Saudi Arabian newspapers coverage of the drugs issue in this respect, because it was largely a political movement. But of course all campaigns even the Saudi Arabian campaign or any study included in the literature review is also a political movement. All the studies which have been reviewed here have taken similar forms. All are overt educational process with emphasis on releasing information to increase knowledge about drugs.

Although it appears that there is less relevance between the Saudi Arabian newspapers coverage of drugs and the Nixon campaign with regard to their objectives, nonetheless it needs to be included in this review. Many campaigns such as "Heroin Screws You Up" and "Just Say No" campaigns have received official government budgets. The Saudi Arabian one did not. High level Saudi Arabian politicians such as the Interior Minister, his deputy and the chief policemen indicate that the Saudi Arabian campaign was not secret and therefore not comparable to the Nixon one. Yet reviewing the covert campaign by Nixon, can still be useful if only to clarify differences between the two campaigns.

### Studies supporting media impact

The second group of studies is those which support the effectiveness of the mass media in drug prevention. One of these studies was carried out in Norway by Irgens-Jensen and Brun-Gulbrandsen (1971). They examined attitudes
towards drug abuse in the whole Norwegian population. After having spent several years diffusing information about drugs which they called "information and propaganda" they then investigated a random sample of the population. They reported that mass media programming was highly successful in achieving its goals. Their results indicated that a large proportion of their sample reported that they had heard about the propaganda and developed a strongly negative attitude against the drugs mentioned in the coverage and regarded them as highly dangerous substances, (Irgens-Jensen and Brun-Gulbrandsen 1971). In this study we can see the significance of enough exposure to the message as the information-processing model suggested. A large proportion of the target of the prevention programme were exposed to the messages. And as a consequence, in my view, the impact of the programme was great in increasing negative attitudes toward drugs in the country.

A study was conducted by Fejer, Smart, Whitehead and LaForest (1971) of more than 10,000 school pupils in grades seven to fourteen. They tried to determine the importance of the mass media as sources of information about drugs. They were also interested in which source helped to take the decision that marijuana was safe or harmful. The results of the study indicated that the mass media were found to be the most important sources of information about drugs. However, the author suggested that the users of drugs depended for information, more on friends and their own experiences, than sources such as the mass media. With regard to taking decisions on the safety or harmfulness of marijuana, they found non-significant differences between the sources, but that there was a significant difference between the sources for deciding that marijuana was harmful. Their data demonstrated that 50% of those who decided
marijuana was harmful had used the mass media for their information about drugs (Fejer, Smart, Whitehead and LaForest 1971). Here the experience and the level of knowledge about drugs, in my view, play an important role in the impact of the mass media. In this study when the target audience were young with little experience with drugs the mass media seem to have more influence. As a proof of that, the drugs users within the sample of this study relied on different sources of information such as their own experience, but not the mass media. In my view, that is because the mass media is presenting information which is already known by them.

Another study which regarded the mass media as an effective tool for teaching people about drugs was conducted by Goldstein (1974). He analysed some newspapers on drug prevention and found that television was the most effective medium for drug abuse prevention. Also, he reported that when the source of information about drugs has credibility, i.e. is knowledgeable and identified with by the message receivers, the messages seem to be very influential. Educationally oriented programmes with scientific facts and little reliance on high fear appeals were the most effective for drug prevention (Goldstein 1974). This study provided clarification for later research which relied on high fear appeals and less credible source of information especially in a western society, i.e. USA. We can see the differences between this study and its conclusion to regard the mass media as an affective tool when the source is credible and the information is rational but not threatening.

An experimental study conducted by Wong and Barbatsis (1978) assessed the effectiveness of television for increasing knowledge about drugs and changing attitudes towards them. Additionally, they examined the influence of
group discussion on the acquisition of information about drugs. Their programming consisted of three kinds of treatments. First, television programmes which were scripted to increase involvement of the subjects such using different resolutions, contrast and encouragement for taking decisions. Second, there was the method which involved group discussion after each television programme for one hour activating information acquisition among the receivers. Third and finally, were the live radio call-in programmes which came after each period of discussing the television programmes. These involved direct communication between the receivers, "the students", and the sources of information in the television programmes. Based on their results the researchers reported that group discussion did not influence the knowledge gained nor change attitudes about drugs. However, the effectiveness of the mass media in disseminating information about drugs and their influence on the receiver’s change of attitudes about drugs was significantly clear (Wong and Barbatis 1987).

Leathar, Hastings and Squair (1985) have been asked by the Scottish Health Educational Group to evaluate their mass media campaign against drugs. The campaign was promoted through television advertising and booklets which were distributed in a wide range of popular magazines. The campaign messages were aimed at young people, 13 to 20 years old as well as their parents. Their results indicated that the campaign seemed to induce a high level of awareness, particularly among the young people. The majority of the study subjects expressed their liking for and favourableness towards the campaign materials, especially women and young girls, and quite a big proportion of each sub-sample identified themselves as the target of the campaign messages. The
researchers reported that television programming was successful in creating knowledge about drugs among all the subjects. They concluded that the attitudes of respondents were highly negative towards drugs use and the campaign as a whole seemed to achieve its objectives, (Leathar, Hastings and Squair 1985).

Some other groups of studies concluded that the mass media could have some effects when they provide certain kinds of messages, aimed at certain kinds of people and/or associated with some other prevention programmes; these studies did not accept the mass media as effective elements when used alone in drug prevention. One of these is a study by Sussman, Flay, Sobel, Rauch, Hansen and Johnson, which evaluated the viewing of a television drug prevention programme which was called "Don't Be Dope". It was broadcast to the audience through KNBC television and other mass media such as print advertisements and press releases. The programme was hosted by the star of a popular television show and presented during the early evening news. It consisted of several spots in five segments on different days. The researchers tried to assess the influence of involvement in previous or present school-based drug abuse prevention programmes on attending and level of viewing of the television programme. For the evaluation, the researchers assigned 1235 teenagers who had participated in the schools-based programme, 1629 teenagers as a control group and 1232 teenagers who were in a concurrent school-based drug prevention programme. They examined the viewing frequency, the teenagers interest, their learning and their believing and the helpfulness of the programme. Their findings indicated that a) participation in a concurrent school programme increased the viewing of the television programme, b) the more
nights the targets were exposed to the show, the greater their interest, learning and belief. Overall it seems they were helped not to use drugs. The respondents who viewed the programme with their parents had greater interest in learning and believed the messages and found the programme helpful, (Sussman, Flay, Sobel, Rauch, Hansen, Johnson 1987). This particular prevention programme, in my view, adds great value to the information-processing model. In the programme design we can see obvious steps such as assessing frequency of viewing, the target interest in the topic, and their learning and belief of the information provided. It is also supportive evidence to Ray's learning hierarchy which was mentioned in the previous chapter. In this programme viewing with parents increases the level of involvement with the issue among the students. And that is consistent with the learning hierarchy.

Another evaluation study involved in the same drug prevention programme "Don't Be Dope" was conducted by Flay, Pentz, Johnson, Sussman, Mestell, Scheier, Collins and Hansen (1987). This programme was broadcast to raise community awareness and support for drug abuse prevention; it was hosted by the first lady of the USA. For the evaluation of these prevention programmes, a sample of students were assigned for data collection. The research found that reaching adolescents by commercial television was greater than by public television. Also they reported that concurrent participation in school-based programmes with the mass media drug prevention programmes significantly increased viewing levels. Their general conclusion was that the mass media are most effective when supported by a face-to-face communication such as schools educational programmes, (Flay, Pentz, Johnson, Mestell, Scheier, Collins and Hansen 1987).
Johnson, Pentz, Weber, Dwyer, Baer, Mackinnon, Hansen and Flay (1990) have carried out a quasi-experimental design study in Kansas city and another experimental study in Indianapolis to prove the impact of drug prevention programmes. They evaluated interaction between prevention programmes and individual risk factors for drug abuse. Prevention programmes included schools educational programmes, use of the mass media, and the use of parents and community organizations. The programming intervention continued for a four year period. One of these two groups received all components of the whole prevention programming, while the other, the control group, received only the mass media coverage and initial training in the organization of drug abuse prevention. The evaluation of the programmes concentrated on assessing the effects on drug abuse among the subjects of the study. Their findings indicated that the use of marijuana was significantly reduced during the three years of the programme’s delivery. Regarding the mass media effectiveness, which can be noticed in the control groups, and which were exposed to community organization programmes, the effects seemed to be modest, (Johnson, Pentz, Weber, Dwyer, Baer, Mackinnon, Hansen and Flay 1990).

The final study in this literature review is that which concentrated on the campaigns themselves or the message variables but did not consider their impacts on the receivers. Hanneman (1973) studied a television programme about drugs for two weeks of broadcasting and using content analysis found that only 18% out of 85 appeals were directed at youth. Most of these appeals were broadcast during unsuitable times, between the hours of 10 in the morning and 3 in the afternoon. Also, he found that 22% of the appeals messages were
talking about the harmful effects of drugs abuse in society, while 20% of them were about physical effects. About 40% of the programme messages relied on fear appeals for behaviour change. His general conclusion was that most of the appeals were indirect and not specific to the needs of any one of the sub-populations, (Hanneman and McEwen 1973).

**SUMMARY AND CONCLUSION**

From my own experience and during my stay in this country I have been asked about the subject of my thesis. When I say that, it is an investigation about the effectiveness of the mass media, the comments have always been the same, whether by public or professionals who are not in the mass media study. They said there is no need to investigate the topic because the influence of the mass media is absolutely obvious. Among the public and technicians who work in the mass media organisations, the concept of the effectiveness of the mass media is seen as self evident but not so among academics. In drug prevention, the mass media is often regarded as critical to disseminate information or to change attitudes and modify drug using behaviour. In the past there have been many attempts at using the mass media in drug prevention campaign in many countries. It is no easy to give a clear cut conclusion about the effectiveness of the mass media in drug prevention. There are many factors and variables which influence the mass media and human communication generally. The quality of the messages provided and the structure of the society as well as availability of drugs have quite a large influence on the success or the failure of the preventive programmes. For example there are many good quality programmes with well targeted audiences which did not achieve their goals simply because the
message did not reach target audiences.

The effectiveness of the mass media can be divided into three categories. First there are those who regard the mass media as unlimited, powerful, influential tools. Second there are those who regard the mass media as powerless with very limited effect, and third and finally those who think that the mass media can be useful and affective but only under certain conditions and circumstances. Each of these views have dominated in different periods of time.

In the literatures presented in this chapter there were two different groups of studies with regard to the effectiveness of the mass media in drugs prevention. First there are those studies which conclude the mass media have little effect in drugs prevention and the second those who indicate that some preventive programmes have succeeded in increasing knowledge and changing attitudes towards drugs. All these studies were carried out in western societies, i.e. USA, Canada, Australia and here in Britain.

In the first group, which showed little effect of the mass media, there were many uncontrolled factors and variables which undermined the influence of the mass media. Many studies in this group presented messages with high levels of fear appeals which were threatening to their audiences. However, the audiences probably considered these messages are exaggeration and thought they give unrealistic information about drugs. In western societies these kinds of messages do not work well. People in these societies have more freedom and access to other things including drugs than those in societies such as in Saudi Arabia for instance. In the United States of America for example the use of drugs has permeated most age groups, (Safer, L. et al 1993). Although there are some who do not use drugs they have friends or relatives who do so. Some
have sources of knowledge about drugs which give different information from that which the mass media provides. So the mass media may present high level of fear appeals and produces threats that are not consistent with the knowledge they already have. For instance when the message says that drugs *will kill you* the receivers do not believe it because they know somebody who uses drugs and is still alive and continuing with his daily life. That decreases the credibility of the mass media among the receivers and makes them less attentive to their messages. In contrast, in some societies such as in Saudi Arabia the first source of information about drugs is the mass media. So, people have no other sources from which to learn. That provide an opportunity for the mass media to be the most influential. In this situation fear appeals can be useful to frighten people away from the use of drugs.

Some of these preventative programmes do not have specific target audiences. According to the literature when the receivers realised that they were being targeted they attend to it and the level of exposure is increased. But a message which is suitable for old people may not be good for young people, and drug users might require different messages from those who do not use drugs. So when the programme does not specify its target audience, attention to its message seems to be low, and thus some of these programmes indicate little effect by the mass media on prevention of drug abuse.

Vague or unspecific information about drugs has always been problems for the programmes. For example, one of these studies, (Hanneman 1973), showed that there was little attempt to provide specific information about drugs.

Besides these preventative programmes there are other studies which conclude that mass media preventative programmes could have influence if they were
to be better planned and prepared. Most emphasised that the mass media can be useful if they provide well prepared information, delivered through the right medium, at the right time, to the right audiences, by the right source and with very sufficient exposure. Comparing the first group of the studies with these shows the differences between the two approaches.

These second group of studies which support the effectiveness of the mass media seem to be free of many problems associated with the first groups. Information provided in this group of studies is more specific than provided in the first group. Also the target audiences were defined (Leathar, Hastings, and Squair 1985).

The nature of the message in this second group of studies was more rational. They did not use simple of threatening message as did first groups, but they provided information which seemed to be more realistic and acceptable. Also they were delivered by more credible sources than the first group.

The most significant difference between the two groups was the level of exposure to the programme’s messages. In the second group the frequency of viewing and sufficient exposure of the target audiences seemed to be greater than in the first. This finding is consistent with the information-processing model. Unlike in the first group the audiences belief in the information was greater (Susman et al 1987). Perhaps due to the kind of messages and the credibility of the sources of information. In the information-processing model belief in the information is an important step if attitudes to be changed.

There was another difference between the two groups. Some of the studies, which did not support the effectiveness of the mass media, had target audiences which were older and more likely to have more freedom and access to drugs
and probably more experience too. However, in some of the second group’s studies the target audiences were younger and likely to be under their parents control. That decreased the chance of experience with drugs, e.g. (Susman et al 1987). So a target audience of this kind was more likely to believe information about drugs than those who already have knowledge and may have experience of drugs.

In summary, there would seem to be clear differences between the two groups of studies. The studies which supported the effectiveness of the mass media had more exposure, more rational and specific information, and belief in that information, than the other group. They seemed to be more consistent with the information-processing model, which emphasises enough exposure, increase knowledge, increase in awareness, then belief and that will lead to the attitude change.
CHAPTER FIVE

(Result of the content analysis)
Content Analysis

This chapter will be devoted to the content of the mass media. It will describe the content of the Saudi Arabian mass media with regard to drug coverage including the extent of the coverage, the source of information, the presentation of its messages and the target audience.

Before launching any campaign there should be prior research on the target audience to enable the communicator to recognize the characteristics of his receivers, their needs, the time available, their trust and their favourite medium in order to plan the content of the message. For example, a campaign which is sent through the radio to a group of people who do not like or do not often listen to the radio is not expected to have great impact upon them. So, a campaign without consideration of its target audience attributes has a greater likelihood that they will ignore its messages and misunderstand its content; perhaps they will even reject it and challenge its claims, (Roberts & Maccoby 1974).

The aim of the campaign should be clear to the communicator and the information provided should be relevant and specific about the topic. For example it is unwise to launch a campaign about smoking with a message to explain that smoking is unhealthy and harmful to a group of people who already know that fact. Teaching them some skills to help them how to stop smoking would be much more wise. So, in order to get the best results, the campaigner should choose the best source of information, with the best messages, and through the best channel, at a proper time and to the right recipients.

Explanation of the Saudi Arabian anti-drug campaign and its content will be discussed in the following sections. These deal with the extent and length of the coverage, the
sources of information, the messages and the target audience of the coverage.

1- Extent of the Coverage (channels)

To examine the content of the Saudi Arabian mass media anti drug campaign coverage, samples from the newspapers and television programmes were selected for analysis. The Riyadh, Okaz and Jazerah newspapers and Yamamah Magazine together with some television programmes were randomly selected according to the procedure previously explained in the methodology chapter.

The present data from the newspapers indicates that during 1991 from first of January to the end of December these newspapers published 387 articles about drugs. Okaz Newspaper published 51.4% (199), Riyadh Newspaper published 39.3% (152), while the Jazerah Newspapers published 8.3% (32). The smallest one was the Yamamah Magazine, with only 1.0% (4). (see table 2)

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<thead>
<tr>
<th>Newspaper</th>
<th>Percentage</th>
<th>Frequency</th>
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<tbody>
<tr>
<td>Riyadh Newspaper</td>
<td>39.3%</td>
<td>152</td>
</tr>
<tr>
<td>Okaz Newspaper</td>
<td>51.4%</td>
<td>199</td>
</tr>
<tr>
<td>Jazerah Newspaper</td>
<td>8.3%</td>
<td>32</td>
</tr>
<tr>
<td>Yamamah Magazine</td>
<td>1.0%</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>387</td>
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The peak period of publishing about drugs was during December, 13.4% (52), while the second highest point was in July, 12.1% (47), this was followed by June, 10.3% (40) then August, October and November had about 9.0% while January and
April had 7.0% (see figure 4).

Although the selected period of content analysis of the newspaper coverage of the drugs issue was 1991, it is worth showing the proportion of publishing for a different period of time. It has been mentioned earlier that the newspapers started their coverage of the drugs issue in 1989. To prove that and to determine the dramatic increase in the publishing about drugs a count of drugs related items was carried out from 1986 to 1991 in the Riyadh Newspaper. The count only concentrated on the number of articles related to drugs, but did not include a qualitative consideration except for 1991. The result of the count is demonstrated in figure (5).
The diagram clearly demonstrate a dramatic increase in publishing about drugs since 1989. The three years of 1989, 1990 and 1991 differed largely from the previous years in the diagram. Although the year of 1990 had a peak of publishing about drugs, the other two years still have high proportions in contrast to the previous years. The materials which were published before 1989 take the form of news and do not concentrate on an educational style such as effect of drugs, health points and social life. However, the materials published since 1989 have a different style. They take the form of education and concentrate on the effect of drugs on health, social conditions and morality as will be explained in the theme section of this chapter.

In the television data analysis there were seventeen programmes
broadcast to the audience from 1st January to the end of December 1991. In every month of the year there was at least one broadcast about drugs, while some months had more than 15 broadcasts about drugs, e.g. in March when a very well known series was shown.

2- Sources of information

The sources of information are varied and include those who write the programmes and those who present them. In the communication process, the source of information is one of the most important keys. Atkin, said "the first element that can be manipulated by the campaign planner is the source or the spokesperson presenting the message". (Atkin 1981, p.48). The source of information could be a person who delivers the message directly to the audience or an organization which is responsible for delivery of that message to the receivers.

The most important factor in the source of information is credibility with the target audience. The more credibility the communicators have the more likely they are to affect the receivers of the message. In many previous studies the credibility of the source of information depended on the target audience. So, different segments of the receivers will trust and regard different kinds of the source as credible. Many studies have shown a significant relationship between the credibility of the source of information and its effectiveness upon the message receivers (Simons & Moyer 1970). For example the drug users have been shown to differ from the non users in their trust of the source of information; drug users tend to trust an ex-user or current user more than they
do the experts.

As described in Section One Atkin (1978) saw the source of the information as being in three basic categories. First the experts or competent source of information such as doctors who are suitable for a technical topic; second, an ordinary person who shares characteristics with the target audience and is preferred for a persuasive approach. Third, there is what is called a dynamic source of information such as a famous person who will attract the attention of the receivers to the topic. According to a study by Smart and Fejer (1971), scientific experts are seen to be the most credible source of information by all segments of the audience. Another aspect of increasing the effectiveness of the source of information is the similarity it has to the message receivers. A source of information which is familiar to the receivers is more likely to be liked (Flay & Schlegel, R. 1981).

In my study of Saudi Arabia the authors of the newspaper articles were divided into eight categories and coded as, authors, politicians, policemen, academics, media editors, foreigners, medical practitioners and religious leaders. All were coded and placed into one of these categories; except, that is, for a small number of articles which seem to have been written by one of the newspaper staff and could not easily be coded according to the categories above.

Analysis of the data shows that the media editor contributed the biggest proportion of the coverage, 30.5% (118 articles), then doctors who contributed 16.6% (64 articles) of the published material. Other significant contributors were the foreign correspondents and academics who wrote around 14.5% each. The differences between the newspapers in this respect are shown in table (3).
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<th></th>
<th>Politician</th>
<th>Policemen</th>
<th>Academic</th>
<th>Ordinary</th>
<th>Media editor</th>
<th>F.corresp.</th>
<th>Doctor</th>
<th>Religious Leader</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riyadh</td>
<td>5.3% (8)</td>
<td>7.9% (12)</td>
<td>13.2% (20)</td>
<td>3.9% (6)</td>
<td>19.7% (30)</td>
<td>25.0% (38)</td>
<td>22.4% (34)</td>
<td>2.6% (4)</td>
<td>39.3% (152)</td>
</tr>
<tr>
<td>Okaz</td>
<td>0.0% (/)</td>
<td>5.5% (11)</td>
<td>15.6% (31)</td>
<td>12.1% (24)</td>
<td>38.7% (77)</td>
<td>10.1% (20)</td>
<td>14.1% (28)</td>
<td>4.0% (8)</td>
<td>51.4% (199)</td>
</tr>
<tr>
<td>Jazeraah</td>
<td>9.4% (3)</td>
<td>40.6% (13)</td>
<td>6.3% (2)</td>
<td>6.3% (2)</td>
<td>31.3% (10)</td>
<td>0.0% (/)</td>
<td>6.3% (2)</td>
<td>0.0% (/)</td>
<td>8.3% (32)</td>
</tr>
<tr>
<td>Yamamah</td>
<td>0.0% (/)</td>
<td>0.0% (/)</td>
<td>75.0% (3)</td>
<td>0.0% (/)</td>
<td>25.0% (1)</td>
<td>0.0% (/)</td>
<td>0.0% (/)</td>
<td>0.0% (/)</td>
<td>1.0% (4)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2.8% (11)</td>
<td>9.3% (36)</td>
<td>14.5% (56)</td>
<td>8.3% (32)</td>
<td>30.5% (118)</td>
<td>15.0% (58)</td>
<td>16.5% (64)</td>
<td>3.1% (12)</td>
<td>387</td>
</tr>
</tbody>
</table>
Some of those sources of information who contributed to the newspapers coverage of the drug issue have been interviewed. The interviews will determine clear evidence of the existence of the campaign which was carried out by the newspapers, the nature of the campaign message, and what the messages of the campaigners and their aims from the campaign. This information was obtained by interviewing some senior contributors in the campaign such as editors, journalists, politicians, senior officials, doctors and teachers. As was expected not all of them were easy to interview, and access to politicians and senior policemen was not obtained. This was disappointing as it was thought that the most beneficial interviews could have been held with the Interior Minister, his deputy, the President of the General Presidency of Youth Welfare, and the Major General of Police Departments for Drug Prevention. The assumption that these people were important was based on the materials of the campaign itself in the newspapers. Most of the newspaper articles indicated that these senior figures played major parts in the campaign. The trip resulted in ten interviews with 2 editors, 2 journalists, 2 teachers, 1 senior official, 2 doctors and 1 university lecturer. All of them had participated in the campaign about drugs and were key figures in the campaign. The interviews showed the purpose and aim of the campaign, the nature of the message and who were the campaigners. There were similarities throughout, particular with regard to the aims of the campaign and what the contributors were trying to do. In general all the contributors indicated one major aim of the campaign: they were trying to increase knowledge about drugs. They stated that they tried to give information about how bad drug are for the human body and for the society.
First they were asked what they had tried to do in the campaign against drugs. However the interviews did not reveal clearly that these contributors had played a major part in the decision making, except for the senior official of the Police Department. He was the manager of the Awareness Department in the Police. Although there was no clear admission from him and the other the answers indicated that they had been asked or invited to participate. For example, the interview with one of the teachers indicated that he participated as a result of an invitation to his school to visit the campaign exhibition about drugs in Riyadh. Following that visit he was invited by a journalist to express his views about the problem. He started by distributing some leaflets and posters. He then wrote some articles about drugs for the newspapers. I think it is clear that his aim was to spread information about drugs and to increase knowledge about their effects.

A similar thing existed as far as the doctor concern. He was trying to increase knowledge about drugs. He indicated that he is specialist in chemistry, and drugs prevention interested him. He stated that his aim was to tell the truth about drugs. He thought most of younger generation in Saudi Arabia have little knowledge about drugs, especially about chemical nature. He thought if they knew the effect of these substances they would not touch them. So he tried to increase the pupils knowledge about drugs.

The university lecturer had also contributed voluntarily to the campaign. In my interview with him he demonstrated that he had been writing sometime for the newspapers when the campaign started. He then decided to participate because the topic was interesting to him. His aim was similar and consistent with the campaign aim, which was to increase knowledge about drugs. He said he tried
to advise the pupils that drug experiences, even single one could turn them into addicts. That was this aim in the campaign.

There were two interviews with newspaper editors and two others with journalists. There were no important differences between the editors and the journalists. I think the editors interviews are important. Two editors tried to show that their newspapers made major contributions to the campaign about drugs, as shown regard to the materials about drugs by the data shown elsewhere in this thesis. However, in answer to the questions about whether they had responsibility for the campaign or whether they organised it or not they indicated that they had not. But they insisted that their policy was to increase knowledge about drugs. That was their main interest. With regard to the newspapers' benefit, particularly making money, they denied that it had made any money except for some advertising by a few companies who wanted to warn about drugs in their adverts in the Okaz Newspaper.

The journalist were not very different from the editors. Both said they were responsible for social affairs in their newspapers. The campaign was their responsibility and within their jobs specifically.

The most important interview however was with the senior official of the Police Department of Drug Prevention. He was the manager of the Awareness Section. He indicated that he was responsible for the campaign, and he played major part in it. He said "as a responsible section for awareness about drugs, we decided to change our policy on drug prevention. It had to be complemented by educating people about drug harm and spread knowledge about their bad effects". The interview shows that he made a large contribution and had made contacts with the mass media, professionals and officials encouraging them to
participate and express their views in the campaign. His interview gave clear
evidence about the aim of the campaign.

Generally the message which the campaign tried to deliver was that drugs are
very harmful and should not be touched under any circumstance. That was
clear from the interviews and substantiated by some content analysis. All the
interviewees indicated that they had tried to teach people about drugs and to
increase awareness and knowledge about the effects of drugs. However there
were some differences in the kinds of messages and information which had
been delivered, particularly between the specialists. For example, the interview
with the doctors and the teachers indicated that different kinds of message had
been published. The doctor for instance had concentrated on the medical point
of view and on the health aspects. He said "as a doctor and specialist I know
the effect of these substances on the body, so most of the article I wrote
explained that point". The interview with the two teachers shows different
angles. They indicated that they concentrated on the social life and the
relationship of the children with the family. Also they discussed the religious
points of view. For example, one of them said "I am a father of children and
a teacher at the same time. So I was interested to explain to the pupils the
effects of the drugs on studying and family life. Also I explained and emphasised
the view of Islam on using drugs". The editors and journalists did not show
differences in their messages about drugs in their interviews. The feature of
their messages was that drugs must be avoided.

The nature of the campaign has been determined from these interviews. In
general it was a mass media campaign against drugs. But within the coverage,
particularly shown by the interviews and news, there were some activities such
as conferences and seminars about drugs which were also introduced. They reported news about drugs, meetings, conferences, exhibitions, and seminars in different cities were given. Other contributors such as teachers and doctors indicated different activities. For example, one of the teachers indicated that he had started organising visits to schools with drug exhibitions and seminars. The university lecturer began holding seminars about drugs at the university. To conclude them: the nature of the campaign can be said to have been a mass media campaign about drugs with some additional activities such as posters and conferences about drugs aimed at encouraging pupils to avoid drug at all.

These interviews did not reveal clearly who was the campaigner and who was directly responsible for the campaign except the Police Official. All of them were asked to what extent they saw themselves as a part of the campaign. The Police Department’s official admitted his responsibility for the campaign, but the others did not. The editors and the journalists claimed some responsibility but that did not mean in my view they were the responsible for the overall decision making.

Although these interviews have produced some important data, they must be seen in level of the situation within the country. I think they need to be complemented by some additional work. As complementary evidence these interviews are supported by some content and qualitative analysis. The aim of which is to determine and to find out within the newspaper coverage materials themselves more evidence of who was responsible for the campaign and who directly organised and managed it. I believe that the qualitative analysis of some materials from the newspapers will add substantial valuable evidence about the campaign.
There were official statements within the campaign materials by the director of the campaign, the general trustee of the campaign, and some other senior officials in the Interior Ministry which indicated who launched the campaign. The content analysis will be mainly concentrated on materials related to these four official figures: President of the General Presidency of Youth welfare, the Major General of the Police Department for Drug Prevention, the Interior Minister and his deputy. These points will be discussed below.

In general all of them gave speeches on television and wrote articles about drugs for the newspapers. Most of the articles in the newspapers indicated directly that the manager and president of the campaign committee was the President of Youth Welfare. They explicitly called him by his name, professional position and this title, i.e. the president of the committee of the campaign. Other news items indicated the same concept. They show that he had rewarded some people who participated in the campaign. For example, Riyadh Newspapers 29-5-1991 published news about a reward given by the president of the campaign for drug prevention to some active groups. The article said "H.R.H. the General President of Youth Welfare, who is the president of the committee of the campaign against drugs, gave some acknowledgement and appreciation certificates to some active groups and officials who contributed to the campaign against drugs" It is clear that the article called him the president of the campaign committee. Another article of news in Riyadh Newspaper on 18-9-1991 said that "H.R.H. The General President of Youth Welfare, the president of the campaign committee had rewarded some officials in the government for their participation in the campaign. They were: the manager of education in Riyadh Region, the manager of the medical office in Riyadh and
the delegate of the Institutes of General Administration". This is a very significant article in my view. First it indicated that the president of the campaign was a high level governmental official, and second it shows that there were other governmental officials who participated in the campaign. On 14-2-1991 Okaz Newspapers published a large space article about an exhibition which was opened by the president of the campaign. The article shows his photograph and the headline said "Prince Faisal opened the exhibition of drug awareness. He said he hoped people would attend to learn about drugs". Saudi Arabian newspapers can not print any materials or statements against the government. So, by quoting these articles it is clear who was the president of the campaign. Moreover it shows that the campaign was supported by the government. There were other articles similar to these which mentioned the name of the president of the campaign, but I think these are enough to make the point.

The second part of the campaign was organised by the Interior Ministry. It was represented by the Police Department for Drug Prevention, and its Major General was the trustee of the campaign as was clear in many articles in the newspaper. In the newspapers coverage of the drugs issue there were a number of articles and news about this man and his activities and contribution to the campaign. They have called him the Trustee of the committee of the campaign. From my own experience a military man in Saudi Arabia can not work voluntarily. He can not even by law do any private business. So, that is too further evidence that he was involved in the campaign as part of his professional work. For example, in Okaz Newspaper on 13-6-1991 there was quite a large article about drugs. The headline of the article was a quotation
from a statement made by the Major General of Police Department. His photograph in his military uniform was also presented with the article. The article was about Law enforcement for drug prevention. In the text there were many statements and quotations by this man. It said "the manager of the Police Department of Drug Prevention, the trustee of the committee of the campaign.....". Another article in Riyadh Newspapers on 23-4-1991 about drugs demonstrated similar evidence. It was about the drug committee meeting. The article said "The committee of the drug campaign is meeting tody in the Police Department of the Drug Prevention, in the presence of the Major General, the trustee of the committee, and delegates of each Interior Ministry, Health Ministry, National Garde, and other governmental bodies". The article made it clear who was the trustee of the committee. Also it gave additional evidence that there were other governmental bodies have contributed to the campaign. Riyadh Newspapers on 6-8-1991 also published an editorial article about drugs with a large font headline. It said "By the pen of the Major General of Police Department, the trustee of the drug campaign". Because the article was an editorial one and written by him there was no need to mention his position. Clearly the article itself was a part of the campaign because he was the campaigner and he advised about drugs.

There were many articles like these which emphasised who carried out the campaign and who sponsored it. As a conclusion I believe that the Police Department of Drug Prevention had a large part to play for this campaign.

Another kind of evidence about the campaign can be demonstrated by pointing to articles written by the Interior Minister and his deputy. In the campaign materials there were some articles written by the Minister and some
interviews with him. For example, Okaz Newspaper on 26-6-1991 published an editorial article written by the Interior Minister himself. The article presented his photograph and the headline said "by the pen of Prince Naief". The headline said "the country's honour and the drug epidemic". It started with a paragraph on the development of the country and then describe its important pillars of which are its human beings. Then it discussed how that resource can be destroyed by drugs. In this article it is clear that the Minister himself was campaigning. On the same page the Deputy of the Interior Minister was also interviewed about drugs. He emphasised the effect of foreigners on the drugs problem in the country. He said he appreciated the importance of the campaign and its success in educating people about drugs. On 14-11-1991 Riyadh Newspaper published another article about drugs by the Interior Minister. He directed and advised that there should be an increase in the campaign about drugs. Newspapers in Saudi Arabia would not give a false or non existent information from a senior politician. That too was clear evidence of a campaign about drugs.

The Interior Minister and his deputy are high level politicians in the Government and any statement by them in the newspapers is regarded as an official statement and representing the Government’s view. These articles clearly show the view of the government about drugs.

Another kind of evidence about the campaign is about official openings of the campaign activities in different cities by their governors. For example, Okaz Newspaper published a news article about opening the campaign in the Southern Region by its governor. The headline said "Prince Faisal announced the beginning of the campaign in the Southern Region today. Also Riyadh
Newspaper published a similar article in Taief city. It said "the governor of the city announced the beginning of the campaign". There were many articles similar to these. These articles and news show how closely involved these governmental bodies were in the campaign.

With regard to the aim of the campaign evidence can be obtained by some content analysis of the newspaper materials. The interviews did not indicate clearly the reason for the campaign. Nor did they show whether the drug problem in Saudi Arabia is big or not. The Police Department senior official said the drugs problem appeared everywhere in the world. But it is not clear whether Saudi Arabia was included in his definition or not. However within the campaign itself there were many official statements by the trustees of the campaign and the Deputy of the Interior Minister that the country did not suffer from a big problem with drugs. For example, in his speech in the television, the Major General of the Police Department for Drug prevention, the trustee of the campaign said "I can assure you that we do not have a real problem with drugs, but the campaign is just to educate people about how dangerous drugs are and as a safeguard". Also there were many articles which emphasised the purpose of the campaign which seemed to indicate that there was not a big drugs problem in Saudi Arabia, but it was an awareness campaign about drugs as the newspapers indicated.

As a conclusion the interviews with some senior contributors to the campaign and the qualitative content analysis both indicated that the campaigner was the Saudi Arabian Government, who was represented by two organisation. First was the General Presidency of Youth Welfare, whose president was the General director of the campaign. Second there was the Interior Ministry
represented by the Police Department of Drug Prevention whose Major General was the trustee of the campaign. The aim of the campaign was to educate people about drugs and to increase their knowledge and awareness about drugs. The nature of the campaign was that it was a mass media campaign generally; but there were some other activities such as conference, seminars and some exhibitions. The whole message which the campaign was trying to convey was that drugs are harmful and should not be touched. Moreover the Government will not tolerate drug dealers or users. Also the interviews and content analysis determined to what extent the campaigners saw themselves as a part of the campaign. The result indicates that they felt they played only a small part in it except of course for the police department official.

The source of information in the television programmes has been defined as the spokesperson in the programmes. That means, in the interview programmes the source of information as far as the audience is concerned is the interviewer but not the interviewee. Looking at the television data the analysis indicates that 41.2% (7 programmes) were narrated by actors. (The sources of the information were the actors because they were the only spokesperson who appeared on the screen.) The source of information in 35.3% of the programmes (6) were doctors, while the source of information in the remaining 23.5% (4 programmes) was a drug user, (see table 4).

<table>
<thead>
<tr>
<th>Table (4) show source of information in the television materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Actor</td>
</tr>
<tr>
<td>Doctor</td>
</tr>
<tr>
<td>Users</td>
</tr>
</tbody>
</table>
3- Message content

The message of the campaign represents the quality of the campaign. If, for instance, an excellent trustworthy credible source delivers, via a popular medium, a weak non-logical and unacceptable message to the audience, the audience will not believe it and the coverage as a whole will fail. In this section the content of the message will be discussed under 4 subheadings: presentation, theme, level of fear appeal and style of delivery.

3.1- Presentation

In this study the presentation of the newspaper coverage of the drugs issue has been examined by looking at four additional variables. These are use of pictures or illustrations, colour, position in the newspapers, and position on the page. A combination of a text with some illustrations or pictures is thought to give the article more importance and make it more likely to catch the eye of the readers.

Analysis of the data indicates that all the newspapers studied used less than 50.0% illustrations or pictures. The total number of articles which were published without pictures was 56.8%. The majority of the articles, 34.4% (167), appeared with one photograph, while 5.9% used two but only 2.8% of the total used three or more. See the table (5).
Comparison between the newspapers indicates that the Riyadh Newspaper published 73.0% of its articles without pictures and 27.0% with pictures, while Okaz Newspaper published rather less, (49.2%). Despite the scarcity of articles in the Jazerah newspaper, it presented 75% of them with illustrations, and the Yamamah Magazine presented all the articles with pictures. The majority of these pictures in the newspapers were uncoloured, 88.8%. Riyadh Newspaper published 78.0% of its pictures without colour, and Okaz published 93.5% of its pictures uncoloured. The Jazerah Newspapers did not use colour at all, but 75.0% of Yamamah Magazine pictures were coloured. See the table above.

Another aspect used to assess the presentation was the position of the articles on the page. Usually the significance of an article which occupies a whole page is much more than one small item in a corner of the page. In order to reveal that point the data coding was divided into three categories: whole page, half page and corner of page.
Most of the newspapers presented their articles in the corners of pages, 56.3% (218), while 26.9% (104) occupied half pages. The articles which were published on a whole page were 16.8% (65) of the total items about drugs in the newspapers (see table 6).

( Table 6 ) shows the placing of the articles in the pages

<table>
<thead>
<tr>
<th></th>
<th>Whole Page</th>
<th>Half Page</th>
<th>Corner</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riyadh newspaper</td>
<td>5.3% (8)</td>
<td>28.3% (43)</td>
<td>66.4% (101)</td>
<td>39.3% (152)</td>
</tr>
<tr>
<td>Okaz Newspaper</td>
<td>23.1% (46)</td>
<td>23.6% (47)</td>
<td>53.3% (106)</td>
<td>51.4% (199)</td>
</tr>
<tr>
<td>Jazerah Newspaper</td>
<td>21.9% (7)</td>
<td>43.8% (14)</td>
<td>34.4% (11)</td>
<td>8.3% (32)</td>
</tr>
<tr>
<td>Yamamah Magazine</td>
<td>100.0% (4)</td>
<td>0.0% (/)</td>
<td>0.0% (/)</td>
<td>1.0% (4)</td>
</tr>
<tr>
<td>Total</td>
<td>16.8% (65)</td>
<td>26.9% (104)</td>
<td>56.3% (218)</td>
<td>387</td>
</tr>
</tbody>
</table>

Table 5 (above) shows that Riyadh Newspaper presented most of its material in the corners of pages, 66.4% (101), and 28.3% (43) in half pages. Okaz Newspaper published 23.1% (46) of its material in whole pages and another 32.6% (47) in half pages, while 53.3% (106) were in the corners of pages. All the Yamamah Magazine articles were on whole pages, while only 21.9% (7) of the Jazerah Newspaper were on whole pages.

The last element of the newspapers presentation is the page on which the items were printed. Publishing the articles on the front page of the newspapers makes them more attractive for the readers. The data coding was divided into four categories of front page, back page, first quarter and second quarter.

The majority of the published articles were in the first quarter, 69.0% (267), while 27.1% (105) were in the second quarter. Only 2.3% (9) of the total
published material was on the front pages of the newspapers (7).

( Table 7 ) shows the placing of the articles in the newspapers

<table>
<thead>
<tr>
<th></th>
<th>Riyadh</th>
<th>Okaz</th>
<th>Jazerah</th>
<th>Yamamah</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Page</td>
<td>0.7% (1)</td>
<td>2.5% (5)</td>
<td>3.1% (1)</td>
<td>50.0% (2)</td>
<td>2.3% (9)</td>
</tr>
<tr>
<td>Back Page</td>
<td>1.3% (2)</td>
<td>0.5% (1)</td>
<td>9.4% (3)</td>
<td>0.0% (7)</td>
<td>1.6% (6)</td>
</tr>
<tr>
<td>First quarter</td>
<td>57.2% (86)</td>
<td>76.9% (153)</td>
<td>78.1% (25)</td>
<td>50.0% (2)</td>
<td>69.0% (267)</td>
</tr>
<tr>
<td>Second quarter</td>
<td>40.8% (62)</td>
<td>20.1% (40)</td>
<td>9.4% (3)</td>
<td>0.0% (7)</td>
<td>27.1% (105)</td>
</tr>
<tr>
<td>Total</td>
<td>39.3% (152)</td>
<td>51.4% (40)</td>
<td>8.3% (32)</td>
<td>1.0% (4)</td>
<td>387</td>
</tr>
</tbody>
</table>

Comparison between the newspapers in this aspect indicates that the newspapers published most of their material in the first quarter. However, the Okaz Newspaper had some exceptions when it presented about 2.5% (5) on the front pages. (see the table above).

For the television programmes the presentation can be judged by the time of the broadcast, the duration of the programmes and their repetition. All the information on this was provided by the Planning and Programming Department. So, although it was not possible to view all the items all 17 programmes have been included in the study.

The broadcasting time by Saudi Arabian Television is divided into four categories. First from 10 o’clock in the morning, to 3 o’clock in the afternoon which is supposed to be for the housewives. The second period is from 3 to 6 o’clock in the afternoon and the third period, which is the prime time, is from 6 to 10:30 in the evening. The last period is from 10:30 to the end of broadcasting at 1.30 in the morning.
Results show the majority of the programmes were broadcast in prime time, i.e. from 6 to 10:30 o’clock in the evening; there were 47.1% (8 items) in this period. In the fourth period there were 29.4% (5), while only 23% (4) were in the second period, and none in the first one.

The length of broadcasting was counted in minutes. A series of programmes was also included in the duration. So, programmes which had two episodes of 10 minutes, would be counted as having a duration of 20 minutes. The shortest item was 11 minutes, while the longest one was 85 minutes. The total length of broadcasting about drugs in the Saudi Arabian television campaign was 44 hours and 35 minutes. There were only two repeated programmes 11.8% of the total.

3.2- Theme Of The Coverage

The most important aspect in content analysis is the theme of the messages. Message themes must be pertinent if they are to meet and satisfy the need of its audience. The information should be relevant to the message receivers. Atkin (1981) emphasized that vague, abstract, or distant content will do little to induce attentiveness or learning.

In the present study the researcher coded the newspaper coverage of drug themes into eight categories: health factors, law and punishment, social problems, religious views, kinds of drugs, economic points of view, and a mixed group called more than one topic.

In this section I have tried to assess which of the many potential themes dominated the Saudi Arabian mass media coverage of drugs, and which of them was given the greatest prominence.
It seemed that the dominant theme was the health factor, 40.6% (157) of the articles were talking about the effects of drugs on the body and brain of the drug users and about the danger of drugs on their general health directly or indirectly. The second popular item was concerned with social problems such as destruction of the families, destruction of academic career, losing jobs and so on. This involved 22.2% of the articles. The third popular theme was about international events, (15.0% 58), such as news about drugs in different countries, drug gangs in the outside world and so on. The other categories with no more than 8.0% was about Law, while the lowest was on types of drugs, 0.8% (3). (see table 8)
<table>
<thead>
<tr>
<th></th>
<th>Health</th>
<th>Law</th>
<th>Social</th>
<th>Religion</th>
<th>International</th>
<th>Drugs kind</th>
<th>Finance</th>
<th>General</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riyadh</td>
<td>40.8%</td>
<td>7.9%</td>
<td>19.1%</td>
<td>0.7%</td>
<td>25.0%</td>
<td>0.0%</td>
<td>5.3%</td>
<td>1.3%</td>
<td>39.3%</td>
</tr>
<tr>
<td></td>
<td>(62)</td>
<td>(12)</td>
<td>(29)</td>
<td>(1)</td>
<td>(38)</td>
<td>(/)</td>
<td>(8)</td>
<td>(2)</td>
<td>(152)</td>
</tr>
<tr>
<td>Okaz</td>
<td>34.7%</td>
<td>9.5%</td>
<td>23.6%</td>
<td>5.5%</td>
<td>10.1%</td>
<td>1.5%</td>
<td>3.5%</td>
<td>11.6%</td>
<td>51.4%</td>
</tr>
<tr>
<td></td>
<td>(69)</td>
<td>(19)</td>
<td>(47)</td>
<td>(11)</td>
<td>(20)</td>
<td>(3)</td>
<td>(7)</td>
<td>(23)</td>
<td>(199)</td>
</tr>
<tr>
<td>Jazerah</td>
<td>68.7%</td>
<td>0.0%</td>
<td>31.3%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>8.3%</td>
</tr>
<tr>
<td></td>
<td>(22)</td>
<td>(/)</td>
<td>(10)</td>
<td>(/)</td>
<td>(/)</td>
<td>(/)</td>
<td>(/)</td>
<td>(/)</td>
<td>(32)</td>
</tr>
<tr>
<td>Yamamah</td>
<td>100.0%</td>
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Table (8) also shows the variations in the thematic topics among the newspapers. Okaz Newspaper participated in all the coded themes. Riyadh Newspaper did not include what is called 'the kind of drugs' and the Jazerah Newspaper discussed only topics of health, 68.0% (22), and social problems, 31.3% (10). Only one topic was discussed in the Yamamah Magazine which was health.

Decisions about the themes of the television programmes were taken after watching them. The dominant themes found were health factors, social problems, and law and penalties for using and dealing in drugs in Saudi Arabia. There were 62.5% (5) of them about health, and 25.0% (2) of the programmes were about law and penalties, while only 12.5% (1) was about social problems.

After this overall look at all the thematic aspects of the newspapers coverage of the drugs issue they have been categorised into one of each of the categories mentioned earlier. These will be looked at individually in depth to determine how the newspapers have presented the theme to their audiences.

3.2-A Health

The health factor is the most dominant theme to have been discussed in the Saudi Arabian newspapers’ coverage of the drugs issue. It consisted of more than 40% of the whole materials of the coverage. In the data analysis it was very common to find a whole page devoted to talking only about health problems and the bad effect of drugs on the human body. Most of these articles about health took up fairly large spaces in the newspapers. They usually appeared in whole or half page articles. Also most of them were presented with
illustrations and photographs at the top of the articles or sometimes in the middle. The illustrations in this category represent real photographs of human beings with very bad health and sometimes drawings showing similar conditions which gave a bad impression to the readers about drug use.

The headlines for this category were large with striking strong words. They usually used large font headlines with few words, then gave more words in a smaller heading beneath. These headlines usually concentrated on health factors with suitably specific words. For example, it was common to find words such as "drugs equals AIDS", "drugs are the gateway to disease", "drugs are the first step to death" and so on. The health issue and being healthy is one of the most fundamental needs of a human being. The Saudi Arabian population including young people are not as knowledgeable as some others such the British or Americans about drugs, and that is probably due to the lack of information about drugs before that coverage. I think it was very wise of the newspapers to play on that tone. The newspapers have devoted quite a large proportion of their coverage to the health issue which could have increased the respondents awareness about drugs. These headlines are rather exaggerated in my view, but they might just attract the attention of the readers making them investigate by reading the whole article. Within the literature discussed in this thesis it was clear that health factors have been used heavily by most of campaigns against drugs whether in Britain or in USA. All the American campaigns have used the health factor heavily. I suspect that the Saudi Arabian newspapers have utilised some things from them. Small articles are not very often to be found in this category, but health was sometimes mentioned superficially in the small articles.
Going deeper in to the items themselves explain more how the newspapers approached the health factor and discussed it in their coverage of the drugs issue. They explained more specific details about the connection of drugs taking with diseases, such as AIDS, and how drugs affect the body and the brain. They usually give statistical figures about death from taking drugs, and drugs in connection with AIDS in different countries. For example an article written by a doctor who worked in the USA. He said "we found that high proportion of HIV carriers were hard drugs users. In some articles which seemed to have been written by doctors it is very common to find stories about real cases of people who died because of drug taking or who caught diseases. Some articles in this group tried to associate drug taking with other diseases such as fatigue, weakness, brain death and cancer and so forth. Many articles, particularly large ones, which were written by specialists, referred to international resources such as (Forbes Journal). Some of them were stories written by medical staff, policemen or even drug users’s families reporting their patients or relatives suffering death as a result of dependency on poisonous substances. Here for example was an article written by a group of well known doctors with their photographs on the top of the page. I found the article was interesting. It was sort of psychological treatment in my view. I suspect that it was aimed at drug dealers in the country. The headline was written in large fonts and said "Disease sellers, death sellers". Then another smaller font headline beneath said "We know you do not believe you are selling death". The article had more details about how drugs are associated with diseases and bad health, and supported with some statistical figures. The last quarter of the article was indirect advices to drug dealers. I suppose they tried to raise their spirits and
moral. For example, they said "you probably needed some money for some difficulties, but we are sure you could not kill for that reason. You thought selling drugs was much safer and less dangerous, but we can tell you it is probably sometimes worse than killing. You might destroy a whole family by your action". An article like this in my view, has great impact, especially when it is written by a credible source of information among the sample of the study as the result of the survey show, (see table 56). A few articles in this category were written by women trying to warn about taking some other medical tablets for other reasons, such as for slimming, which could draw them into the drugs world. Articles with more technical terms and their effect on the blood, nerves, body, and human brain were common in this category. They explained how cocaine works in the blood, and how the body responds badly. These were written by specialists such as doctors and pharmacists. They sometimes showed the writers in their special uniforms with stethoscopes or even doctors with their patient or a medical group to increase their credibility among the newspaper readers. A writer like this giving scientific facts about drugs could have great influence, particularly on youngsters and people who do not know much about drugs. They also explained why using drugs once holds the risk of becoming an addict and told how that could happen by reference to real stories. They mentioned how the drugs, especially hard drugs such as heroin and cocaine, destroy some other natural chemical systems in the body, and as a consequence make it dependent on the substance. That makes the users increase the amount of the drug taken to obtain the same pleasure felt the first time and that was a step towards becoming an addict. For instance there was an article about a sensible young man with the headline "they was trust of a friend and
it began with joy, but had a tragic ending”. In my opinion this headline can be perceived in different ways. It is a warning against becoming a drug addict, it is also a warning about being naive and an easy target of some bad friend who could pull you to the drugs world.

Another group of articles gave some detail about other poisonous substance such as glue and so on which had been used by poor addicts or children and killed them. Some doctors told real stories about their patients and how they suffered death, or became unconscious vegetables. Some presented stories with illustrations of disabled babies as a result of their mother using or abusing drugs. Some articles seemed to be directed at students who take drugs to make them work and study harder. But that, as doctors said in the article, could damage the memory in the long run. For example a psychologist in an interview with one of the newspaper staff explained that taking drugs to increase performance whether mental, as in students’ cases, or physical, as in sportsmen’s cases, could have a big negative effect. He said it might help in the beginning but later they will be sorry. Another example of this kind of items was written by pharmacists as was clear at the top of the article from their title and uniform. That was not accidentally written and presented, but to show that he is knowledgable about what he is talking about. He explained how the powder affects the users’ tongue, vision and all his senses. An example of these groups was an article which said “We are specialists and deal with these substances with high level of care because we know how dangerous they are, while some ignorant people use them like tea or coffee; this ignorance, will kill them”.

Another group of articles in the health category seemed to be targeted at the
drug users. They explained and emphasised giving up drug use. All possible ways of treatment are explained in these items. They used words to persuade such as "try to recover", "try to be a normal man", "hospital will create you again", and so forth. Some of them were written by doctors, while others were written by officials who are responsible for drug hospitals and patients such as social workers and policemen. The items which were written by doctors who tried to show how it is possible to be cured of drug addiction, while others tried to show how confidential and safe it is to go to the hospital or to bring your addict relatives. They started that by large headlines for some articles. For example, one of these groups said that "the sun could rise again in your life" as a headline. They gave more details and examples of cures from drugs and the methods used in the hospital with kind words such as "we take care of you", "we will help you" and so forth. They tried to encourage them by telling about addicts and showing their method of arresting the addiction and how kind it is. One headline, which I think was a good representative of encouragement to give up, said "We know you trust us and want to give up taking drugs; you need to tell us and in a matter of a few months in a very confidential pleasant way you will be healthy man". Some articles, especially which were by high ranking policemen present some reward for information about addicts or gangs of drug dealers.

Another group of items in this category took the form of news or events about drugs. These kinds of items usually did not occupy large space in the newspapers. Most of them were to tell about conferences about drugs and health in a hospital or school. For example, an item about a seminar held in the hospital in Riyadh mainly explained to the parents how to treat drug users.
Another one was in a local school for children or youngsters, but there was not much detail about drugs. Although this category of health and drugs consisted only of items which discussed the health aspect and drugs, it is common to find marginal mention of other aspects such as religion and law in less depth, so they do not fit into this category.

3.2-B- Law

The items about drugs in the law category occupied 8% of the whole newspaper coverage of the drugs issue. All the items which discussed Acts, arrest, punishment, sentences and police action are included in this category. The Law in Saudi Arabia is based on the Islamic Law (Shariah). So, it was difficult to judge whether items which discussed the law should go into the religious or the law category. All items in this category discussed religious matters, especially the Koran verses and Mohammed’s sayings about alcohol. However if the main point of the item was about how that affected the law it was counted in the Law category. Most of these articles were written by judges, policemen and governmental officials, while some, but not many have been presented by politicians particularly those which discussed law and agreements with other countries and some conferences. Although the law category was not large in comparison to others such as religious and social, it presented quite a threatening tone from the law and punishment point of view. I suspect that most of this category’s item were aimed at drug traffickers and dealers because they emphasised on punishment including the death penalty and imprisonment. They also might have been meant for young people who had travelled outside the country. For example, one article written by a custom’s
officer gave more details for the Saudi Arabian customs. He explained how they search about drugs in the Saudi Arabian ports and how strict the law is about that. He also explained the arrest process in the ports. The items also seemed to be aimed at foreigners who come to the country without knowledge of the law.

There are not many illustrations with drug items in this category compared to those in health. However the writers’ photographs of some article were sometimes presented. Also there were a few photographs and small cartoons representing a man behind prison bars or with handcuffs in his hand.

The headlines of the items in this category were large and presented threatening words. They were usually presented at the top of the pages. They also presented tough words in the headlines such as, 'execution' and 'long sentences', to introduce fear. It is worth mentioning here that drug trafficking in Saudi Arabia carries the death penalty, while dealing and selling drugs is punished with heavy sentences such as to fifteen years. Also even using drugs or alcohol in Saudi Arabia has penalties ranging from six months in prison to public flagging. As an example of these kinds of items there were a few articles which explained some kinds of drugs and the law which applies to them. Also there was quite a large article, about a whole page, about an interview with judges. They explained their views about the Law especially the death penalty and how it is based on the Islamic Law. It was understood from the article that they tried to explain and justify the death penalty and justified how useful it is for the sake of the society despite its toughness. Sometimes the articles in this category presented their headlines together with other sentences for other crimes. I think this is an effective method without lying or losing credibility.
For example, there was an article which occupied almost a whole page without any illustration, but with a large font headline. It said "execution of criminals, who abducted a young woman and killed her; and drugs offence". In the article itself the death penalty was for the man who abducted, raped and killed the woman, but the drug offence had a different sentence. However, mentioning the death penalty first for the crime then presenting and associating it with the drugs offence might have been useful in my view. This is a way of using facts which could be seen in western societies as misrepresentation but is common in Saudi Arabian press. Some headlines were quotations from some famous judges or politicians, some of them were directly threatening such as "the Government will strike with a hand of iron" or "the Government is very determined to clean the country of drugs" and so forth. One article, for instance, was an interview with a policeman. He emphasised the association of drug taking behaviour with other crimes. He stated that most of the big crimes which he had been involved in investigating had some links to alcohol and/or dealing and abusing drugs. He also said most criminals did not start with crimes as criminals, but they started with drugs whether using or dealing and that was bad enough to draw them in to the dirty crime environment.

In the articles themselves there were more details about the drug law in Saudi Arabia. Some of them gave more details about the kind of offence, whether using or trafficking and which kind of penalties they could face. For example one of these articles was written by a judge who explained when a dealer deserved the death penalty and when he deserved prison. Some articles compared the law in Saudi Arabia with the law in different countries and how effective it is regardless of how tough it is. Stories about arrest and police
storming some gangs of drug dealers were common in this category. A few articles explained some agreements between Saudi Arabia and other countries concerning drugs with regard to the law on drug trafficking, such as swapping criminals and so on. This is a way of emphasis on the determination of the Government in preventing drugs. It is also to show its cooperation with other countries for preventing illegal drugs. So the newspapers tried to presents these facts to the readers in their coverage of the drugs issue.

3.2-C- Social

Within the content analysis all articles and items which discussed social life, families, children’s relationship with parents, men and women’s relationship and friendship were included in this category. The social category was the second dominant one and consisted of 22.2% of the whole newspapers coverage of the drugs issue materials. In my opinion it was sensible to emphasise this aspect in Saudi Arabian society. It is a very conservative and close society and social traditions are strictly respected. It has been said that Saudi Arabian society is probably one of the most conservative societies in the world. Old people are greatly respected and have considerable influence on younger generations as do families status and reputations. So, breaking these values brings great shame not just to those who do it but probably to the whole family.

The materials included in this category were presented with more significant and large font headlines. They were large and usually occupied a whole page or at least half of a page in the newspapers. Also they included many illustrations and photographs, particularly cartoons. Some of these illustrations represent an old man with a sad face showing clearly this article is about something bad, while others represent groups of people using drugs in
bad conditions with poor appearance. This is a true representation of threatening and negative effects of using drugs which the newspapers tried to emphasis on the readers. The headlines in this category were large and usually presented at the top of the pages. They also used hard and striking words. For example, some of them said "I lost my wife and lovely children as a price of one dose of drugs". Another headline said, "a man is happy about his sons death". This is a most unusual statement, so will attract the readers attention. It was true as the article reported. Some other articles presented headlines with words about situations in different countries. For example one of them said "in Latin America an addict sold his son for forty dollars for one dose of drugs". The journalist here tried to emphases how an addict is in fact a slave willing to commit any crime to obtain drugs. Another one said "drugs are a social bomb which will destroy a country".

The articles themselves place great emphasis on the social life of Saudi Arabian society and how valuable it is to be protected from drug using behaviour. Many articles presented threatening words such as "our society will be destroyed if we do not prevent drugs" and "we shall not be kind to those who want to kill our younger generation with drugs". Some of them tried to raise defensive spirit and morale. They said "we are the target of that other country to be destroyed by drugs" and "drugs dealers are traitors from other countries to destroy us from inside" and such threatening words. Some of them tried to direct the speech to the readers. I suspect they were aimed at the drug dealers. They said "you might be from a good family, your father was a great man, or you might be from an honourable tribe, are you now willing to be a traitor and factor of destruction?". Some other articles were stories about
families who were completely destroyed by drug taking. There were many stories about ladies who asked for divorce from their husbands as a result of their becoming drug users or dealers. One article was a story presented by a policeman who was a witness to the event. The story was about a good young man. However, when he became a drug user, then a dealer, he changed completely to become really evil. He stayed in that situation until he died because of drugs when his father said "I was very happy when God gave me that son, but I am happier now that he has taken him back". Another one was about an old man telling his story about his only son and how bad he felt when he became an addict. These stories will give rise to strong passions and are aimed at letting young people think more seriously before they try to take drugs.

Another article was about children who became drug users as a result of their father taking drugs. Another group tried to emphasise the effect of drug use on the children’s mental and physical health and likelihood of becoming disabled. For example one article seemed to be directed at women said to be using drugs during pregnancy which could affect the baby and make it disabled. It is worth mentioning that it was rare to find a story about Saudi Arabian girls or women involved with drugs. Most of the stories were about males. Young vulnerable people were warned against evil friends, also their parents were warned. Direct words like "look after your children, try to know yours son's friends, be careful of your new friend", were used. For example there was an article telling a story about a young man who was a victim of his malicious new friend. And as a result he became a user, dealer and burglar. He said he took drugs for the first time by being cheated with a trick drink from his friend. He put the drug in his
tea, until he became addicted to it. Clearly this is a direct warning to young people to be careful of some friends.

Another article concentrated on the families and their reputations. Some stories were about well known families, without mentioning the names, to protect them from social stigma, who have been destroyed by their children's madness in drug use. Direct questions were included such as "do you want to be evil in the eyes of your pupils, do you want your children to be ashamed of you, hate you and forget you?" They also said "you probably will not find friends or a wife who will accept you to be the father of her children, or some body to let you marry his daughter". "Nobody will ask your daughter to marry him. Who wants a drug dealer to be the grandfather of his children". These facts are very powerful in Saudi Arabian society, so the journalist use them in the threatening way. Some others were written by social editors who tried to answer the readers letters about drug problems. For example, in answers to a letter from a lady who claimed that her son had become an addict and asked what should she do with him, he answered that "the hope was in the hospital, otherwise you will lose him either to prison or death". And he advised her how to start to report to the police or to the hospital authority to ask for help to cure him from his problem. This is using the media as an advisory source.

Many others articles were written by popular social figures. They tried to compare the Saudi Arabian society with others who do not respect social traditions and values. They said these traditions are real shield from many modern problems such as drug use. They warned of losing these traditions by evil actions such as drug taking behaviour. Here the newspapers centred on the value of these traditions in Saudi Arabian society. They have tried by their
coverage to raise fear about the self destructive nature of drug use.

3.2-D- Religion

This category included all the newspaper articles which talked about and discussed the topic from a religious point of view, including how Islam forbids the use of drugs. Some articles were found to have been written by well known religious scholars and leaders, but they concentrated on different issues such as law and social life so they are not included here despite the status of their writers.

It is worthwhile here to explain the Islamic view of drugs and the status of drugs according to the Islamic Law (Shariah). One of the most important pillars of Islam is to protect the human body, mind and spirit. Arabs before Islam, about the 5th century, were heavily involved with alcohol in every aspect of their lives. However when Mohammed (peace be upon him) was sent to them alcohol was forbidden in stages until it became completely forbidden by many verses of the Koran and sayings of Mohammed the prophet. The Koran says "You must believe alcohol and gambling are dirty, filthy and evil actions, avoid them to be safe. Evil wants to introduce hostility through alcohol and gambling and will hinder you from remembering God and your prayers". This rough translation of the Koran verses explains how alcohol is forbidden. There are also sayings by Mohammed which emphasise the penalties for using alcohol. In Islam the cause and logic behind the law are usually explained. Here the reason for prohibiting alcohol is because of its control over mind and brain. So any thing which has a similar function is forbidden. Although in Mohammed’s time there were no drugs among Arabs, all Islamic scholars have
agreed unanimously that it was around the year 1200 when hashish was said to be introduced to Arabia by the Tartars.

Saudi Arabia is a conservative Islamic society. It has been said Saudi Arabia is the heart of Islam and it contains the two holy cities of Mecca and Medina. All muslims in the world direct to it five times a day for their prayers and more than two millions every year go there for pilgrimage, (Hajj).

The newspapers have played this well in their coverage of the drugs issue. It is hard to find a single article which does not mention the religious point of view except those which take outside news. The articles which discussed only religious aspects accounted for only 3.1% of the total. This looks a small proportion in contrast to others such as health or social categories. However, religion and verses of the Koran and Mohammed’s saying were also included in the other categories too. The only items included here are those which include Islam or religious points of view as the main theme.

Most of the articles in this category appeared in large spaces such as full page or half page articles. They did not rely on illustrations very much, except for a few cartoons where the writers were sometimes presented as religious figures or judges with long beards. However, they used large font headlines with religious words such as "evil, hell, forbidden, will of God, bad death" and so forth. For example there was an advertisement about a nutrition company presented on half a page which said drug prevention is an Islamic obligation and commitment. Another headline on a full page article said "Islam is the most significant religion to have forbidden drugs and succeeded in enforcing it".

Many other headlines tried to make it clear how it is strictly forbidden to take drugs by quoting some verses of the Koran and Mohammed’s sayings and other
famous scholars. Another article presented a headline which seemed to be directed at parents which said "strength in Islamic belief is an absolute shield to protect the young from drugs". or "children who grow up in an Islamic environment are unlikely to be drug users".

In the materials themselves there were many details about drugs in Islam. Some large articles gave more details about how Islam strictly prohibited drugs and justified the heavy penalties according to these acceptable sources. Some articles start with Koran verses and a saying of Mohammed the prophet about alcohol printed in larger fonts than the rest of the whole article. They also explained that drug use is worse than drinking alcohol because it is more dangerous. They emphasised how all the Islamic scholars have agreed on prohibiting drugs since early time. Some others discussed different angles of religion. They emphasised the influence of Islam on drug prevention and how strong it is. They explained how children are safe if they are taught about Islam and grow up in an Islamic family. Some of them make a comparison with other countries who have neglected their religious values with regard to drugs problems supported by some statistical figures. One of these items was a conversation between a Saudi Arabian judge and the American ambassador in Saudi Arabia. The ambassador explained to the judge how bad the drugs problem is in the USA and how much trouble his country faced through the drug problems. Sometimes the judge tried to attribute that to the lack of spiritual life in the USA, and mentioned the extent of the drugs in Saudi Arabia and how it is small in contrast to the USA problem. He attributed that to Islam and the nature of Islamic society. He also mentioned the situation in Saudi Arabia with regard to drugs which he said had come recently to the country.
He also raised the issue of foreigners in the country and the rate of drugs crime among them which was larger than among the Saudi Arabian people.

Another article which also used this method compared the rate of drug use among Saudi Arabians with others in the country and attributed the difference to the Islamic belief and fear of God in their hearts. They usually repeated some direct speech in a question form such as "do you want to be evils?, do you want to go to hell?, do you want to be tortured?" and so forth. This kind of threatening message could discourage any one who tried to use or deal with drugs. They described people who do not touch drugs as good people while these who use drugs as evil who will die dirty deaths and go to hell. These items sometimes reminded the reader of the will of God who created them from nothing and gave them every thing and how they can break his law. Most of them call alcohol as well as drugs the mother of dirt and evil as Mohammed said. They recognized it as the first step to crime. Some emphasised the effectiveness of implementing Islamic Law on drug prevention. Although this is not a comparative study, I suspect and personally observed in the British newspapers that they do not rely on religion heavily in discussion about drugs. They discuss health and probably the social aspects but do not rely as heavily on religious words as the Saudi Arabian newspapers.

As mentioned before a religious tone can be seen in all categories. Fox example in the social category, regardless of the nature of the writer, whether policeman, social worker or any one else they usually use some quotations or even verses from the Koran to support their argument about drugs. In the health categories doctors and pharmacists usually showed that Islam is very protective of human beings and their mental and physical health. Also in the law category
most articles, especially those which talked about how drugs are forbidden raise some points of religion and some quotations from the Koran and Mohammed's sayings. They also used some religious words such as evil, will of God, bad death, even if they are not discussing religious matters. Some articles particularly health ones went more deeply and started with the verses of the Koran which prohibit drugs. So the religious aspect seems to be very involved and exploited by the Saudi Arabian newspapers coverage of the drugs issue.

3.2-E International

This category also has links with other categories in the thematic coverage of the drugs issue. Some items about drugs in other categories have discussed drug events and incidents in different countries. However, they can be categorised as a social or health matter because they concentrated more heavily on theses aspects. For example in the social category there was an article talking about a different country, but most of the information was about the social aspect of how the life in that country was corrupted by drugs. In that article there was not much mention of the country itself, probably only a few times at the beginning of the article. So it was categorised as a social item rather than international. Another article was about diseases associated with drugs such as AIDS in the outside world. Although this article was not talking about Saudi Arabia, it was categorised as a health article because the main point of it was about health.

Unlike other categories most of the items in the international category did not have large spaces in whole or half pages. They usually took the form of news items about drugs in the outside world, such as conferences or
agreements between two countries or articles about gangsters. Items which
discussed agreement between countries, particularly which involved Saudi
Arabia, have indicated warning to the drugs dealers in my view. They give the
message that even drug dealers also are outside the country they can be
brought to justice according to these agreements. Some of these items in this
category were associated with illustrations whether cartoons or photographs, of
groups of people using drugs or some conference or police actions. Most small
articles in this category had small headings. The headline of these kind of items
appeared as news such as "Beijing has started a war against drugs by executing
three drug dealers" and so forth. Some of them have large headlines such as
one with a photograph of the USA president with some of his cabinet members.
The headline said "America is determined to win the war against drugs". Although items in this category did not use much threatening or specific
technical information about drugs, they presented the drug problem as not only
a problem of Saudi Arabia but as a world wide problem. They also emphasise,
particularly to drug dealers, that they are against the whole international
community. That in my view is clearly aimed at discouraging potential drug
dealers. From my own experience many people from Saudi Arabia, particularly
young people who have never been abroad, believe that their country is very
strict with regard to alcohol and drugs. In contrast other countries are seen as
very relaxed and free to do what ever they want including using drugs. So,
these articles, which reported news about drugs events in some other countries
have great significance. They explained indirectly the situation in these
countries where many people think there are no problems with drugs.

Usually the source of the news appeared at the top of the article, just beneath
the headline and before the item. For example in the middle of a page there was an item which said "Police in Egypt have found big gangsters dealing in drugs". Under that headline there was in small font word "Cairo" as the place of that incident. Some others, but not many, have presented small headings but quite large pictures such as a Pakistani group of policemen burning a huge amount of drugs. Some headings in this category started with punishment words, such as "executing, prison, killing" and so on. Some other headlines tried to show that all nations are against drugs. An example of these is an article presented with a middle size heading which said "The whole international community are fighting you if you are a drug dealer".

In the articles themselves there was clear discussion and the main theme concentrated on different countries rather than Saudi Arabia with many repetitions of the name of the country. Many articles gave news about how countries could co-operate or alternatively create conflict because of drugs. Some articles gave statistical details about the scale of drug abuse in many countries, especially in Latin America and in the Far East. This could be compared with the home situation. They also described where the drugs grow and how drugs are traded in these countries. Some items were news about gangsters and how they are involved in their country’s government and control most of the power in the country. They also described the high rate of drug crime in some other countries and the association that with other crimes in these countries. In these articles the editors sometimes interfered and gave their judgments against drugs. For example it is common to find words such as "yes that is the result of evil, they deserved it, should happened before, they are fighting the whole international community", and so forth. Some others were
critical of social life in some countries and how it was corrupted by drugs. In these articles which seem to be larger the editor gave some comment at the end. They warned against becoming like that country if drugs spread here. They also asked some questions like, "do you want to make us like them?, do you want to be the cause of that situation in this holy land?" and so forth. Many articles carried a warning for young people who may travel abroad as tourists using fear as a means of control. For example an article about this explained the situation in a country then said" yes you could go and enjoy yourself, but probably you will return in a coffin or with AIDS. One article for example was a story about a Saudi Arabian businessman in an Eastern country. The story explained how he become a victim of drug gangsters in that country despite the fact that he was innocent. He is still in prison and might face a death penalty have been made to rescue him. I suspect that this article was intended to be a warning to those who think their government or even their families wealth could save them from the law. Although there was no direct indication of interference by the Saudi Arabian Government to help the victim, the story emphasised that "efforts have been made" and he was a successful person which means, in my view, he was an important man. And I think the meaning behind that was that even though you are important it might not be enough.

3.2-F- Kind of Drugs

This category was the smallest in the newspapers coverage of the drugs issue. It consisted of less than one percent, 0.8%, of all the materials presented to the audience. The items which were included in this category were only those which used technical terms and descriptions of different kinds of drugs and
substances. In some previous categories there was some mention of kinds of drugs, particularly in the health and the law categories. In the health category, for instance, some articles gave some descriptions of the effects of particular kinds of drugs on the body and the brain. Also in the law category some articles distinguished between some hard drugs and soft drugs by name and gave the penalties for each of them. However the items which gave detailed impressions of kinds of drugs rather than any other issue were included in this category.

These items seemed to be written by specialists in this field particularly doctors and chemists. Most of these did not occupy large spaces on the page, except one which was on just less than half a page. One of these articles was presented with a photograph of some powder, cannabis trees and leaves, and some kinds of medical tablets, with tags of their names. The other article in this category was presented with a photograph of the writer in his uniform and with his name and title of pharmacist. This article did not have any illustration.

There were fewer headlines in this category than in any other categories. They did not use very large fonts. Also they did not overtly present the meaning of their articles, except for one. This headline said "the white poisons" with not very large fonts. Another one said "no to drugs", with no indication of the content of the article itself. This headline was vague. It did not fully represent the article, which was about technical terminology. It could fit any item about drugs whether health, social or even legal categories.

The items themselves did not present threatening or warning words. They were pieces of information providing details about kinds of drugs and their natures and divisions. But that clearly could be seen to be useful. As mentioned
previously Saudi Arabians were not very knowledgeable about drugs and the campaigners may have realised that. So giving more details about some kind of drugs could increase knowledge and awareness about drugs. With such knowledge it becomes more difficult for them to say they use drugs because they did not know they were illicit. One of these articles started with a short introduction about human beings historical relationships with drugs and where they were first discovered. Then it gradually gave more detail about where some are grown and manufactured. Items in this category commonly includes some scientific names of some substances, such as cocaine, hashish, heroin, LSD and so forth. Also local street names can be used particularly those involving manufactured drugs such as barbiturates and amphetamines which are found in many different forms and under different manes. They also explained which kinds of drugs were natural and where they grow, and which were manufactured from chemicals materials. They also described these substances colours and smells and the differences between their dangers and effects using more scientific than emotional terms. It was not common to find words like "kill you, damage your family, introduce you to the world of crimes" such as found elsewhere. However, although they concentrated on scientific fact and provided knowledge, they were also very useful to the readers giving them ideas about drugs, especially young people who do not know much about drugs.

3.2-G- Finance

These were also difficult items to categorise. Some articles in other categories such as social and law discussed financial problems associated with drugs, but not very deeply. However, these items in the finance category were dominated
by financial aspects whether in their headlines or the contents, i.e. losing wealth, seeking wealth or budgeting for prevention. All items which concentrated on such financial aspects were included in this category. It consisted of 3.9% of all the drug materials in the newspapers.

The items of this category varied in size from whole to half pages to small items in the middle or corners of pages. Some of them included illustrations while others did not. Most of the articles particularly the big ones had quite large font headlines with clear financial terms and words. Indeed some of them had started with financial statistics. For example, an article presented a large font headline which said "drugs...take all my life savings" then another heading just under the large one with smaller fonts said "seven hundred and fifty thousands (SR) have been stolen by my European manager as a result of drug dealing". Another headline said "my greed and selfishness have damaged my whole life". Also other articles presented a cartoon of a poor man sitting in front of a mosque putting his head between his knees and begging. The headline of this article said "he was rich but because he was greedy and selfish he is now bankrupt and begging for his food". Another article without illustration presented a headline as a quotation from a drugs dealer. It said "I am the cause of my five brothers loss, I have wasted all their treasures from my dead father". Most of these headlines in the finance category used striking and threatening financial words.

The contents of items in this category were full of figures and financial statements. They discussed financial aspects from several different angles. One group tried to emphasise the idea that greed and abnormal love of money can be a cause of involvement with drugs. One of these was a story of a
businessman who was successful in his job, but because he wanted to be a millionaire quickly he dealt with drugs. He used to sell car parts, then he hid heroin inside these parts and imported it into the country. He said "but I could not escape from the eyes of authority". There were many stories similar to this using repetitions such as "my greed, selfishness, love of money, money is the only thing in my life" and so on. Another group of items explained and emphasised how drugs can be the cause of poverty. One of these was a story about a millionaire who was able to buy any thing he wanted, as he said, but within a short time his most valuable possession, his freedom, was taken from him. He said "I do not need any money now, I do not want wealth, I only need to walk free in the streets like others". Another article in this group represented the story of a young man who wasted his family wealth. The story reported that "there had been a happy family and quite wealthy until their oldest brother had became the head of the family. He was 27 years old and a spoiled boy without responsibility; he become involved with drugs and because he was naive he wasted all of his brothers money on drugs. The article quoted some of his statements: "I am foolish, stupid, criminal, and deserve to die because I am the cause of my brothers poverty and tragedy".

Another groups of articles discussed how drugs wasted public money on the prevention of drug abuse. These articles appeared with some statistical data about the cost of prevention in different countries. The editors sometimes added their comments such as, "and that is only done by irresponsible people, criminal people" and so forth. Some of them added "how many times have you thought about other's money, do you know how much money you cost us for the war on your drugs" and so forth. The economic implications of all these stories
were obviously intended to use fear as a powerful instrument not to become involved with drugs.

3.2-H- Miscellaneous

This category includes all articles about drugs which were really difficult to place in one single category such as health, social or law. The items about drugs which discuss more than one or two aspects without relying on one aspect have been categorised as all inclusive. This category consisted of 6.5% of all the materials in the newspaper coverage of the drugs issue. Most of these items were not very large in size although a few of them appeared on half pages and just a small number on full pages. There were more features than news articles.

The items in this category did not have many illustrations or photographs. Some, but not many have their editor’s photographs. Most of the headlines for these articles did not use very large fonts. Sometimes they used threatening words and terms with more than one aspect such as health or religion. For instance, one headline said "he damaged his health until he died shamefully. Some other headlines represented one aspect such as social, but the rest of the article broached other different points.

Sometimes the articles themselves started with religion for instance, then went on to health and ended with social problems, with similar words and amount of space devoted to each category. They used many words to do with health, social factors and others, similar to those which were mentioned in these categories earlier. For example when the article discussed health problems, it mentioned sickness and diseases associated with drug taking. And when the same article shifted to a religious point of view it talked about lack of spirit
among drug dealers and users. So all articles in this category have used similar patterns of language to those used in the other categories.

It can be seen from this analysis that the campaign was closely associated with the society in which it was based: a traditionalist, religious and family based society. These factors were used to create fear of losing these virtues and were combined with factual information about damage to health and economic and loss of wealth. The aim appears to have been to frighten both potential users and dealers, which is an approach still possible in such a society, but which would not have much effect in a more sophisticated and sceptical society as found in the west.

3.3- Fear Appeals

In some of the early educational prevention programmes on drug abuse there was a heavy reliance on fear appeals (Kinder, 1975). Generally levels of fear appeals can be divided into two levels: high and low. High level of fear appeals can be recognised and verified by invoking a high degree of sickness and accident or damage and death as a result of abusing drugs. Another manner in which high fear appeals come in the mass media is predicting unpleasantness if drugs continue to be taken. With low fear appeals such messages do not appear or are at least extremely minimized. Although messages with fear appeals might be effective, they should be used with great caution. Most specialists in this area warn against using high levels of fear appeals and argued that they usually fail. Nevertheless specialists do not recommend too low a level of fear appeal either. Overuse of exaggerated fear appeals employed as a manner of persuasion to effect attitudes and behavioural change is not always necessary. Sternthal B. and Craig (1974) suggested that moderate level of fear
appeals are more convenient than either intensive high or low levels.

However, if the receivers of the messages are not aware of the topic or it is new for them, arousing fear is likely to maintain audience attention. So in the early stages of using the mass media as an educational means about cocaine in the United States, the use of a high level of fear appeal was probably wise, because the majority of the receivers were ignorant of the topic. Atkin (1981) criticised the heavy reliance on threats of fear appeals, when the target audience are aware or more sophisticated. Another possible way of using high levels of fear appeals in a mass media message is when the communicator has high level of credibility among the receivers of the message.

Since the Saudi Arabian mass media has only recent experience of drugs program and the Saudi Arabian audience are not very aware of the drug message a reasonably high level of fear appeal might be effective.

In this study coding fear appeals in the content analysis was not easy. In order to remain consistent with other studies, levels of fear have been divided into high and low: moderate levels have been excluded. The lack of experience of the Saudi Arabian mass media in educational programmes for drug abuse prevention means they are not sophisticated enough to distinguish between high and moderate levels so it is better to remain with the extremes.

The present data indicates that the Saudi Arabian Newspaper coverage of drugs relied heavily on a low level of fear appeal. It was found that 61.8% (239) of the total of published articles had a low level of fear appeal, while only 38.2% (148) of them were in the high level. In most of these articles a high level of fear appeal is relatively easy to identify. It involves strong warnings and frightful stories about those who use drugs even for the first time.
For example an article might emphasize that getting involved with drugs for the first time, regardless of the amount and the kind of drug taken means the beginning of the end of the young person’s life. Targeting direct advice and illustration, such as 'This is your brain’, or 'This is your life’, is commonplace in Saudi Arabian coverage of drug issues. Telling stories which sometimes appear to be fictitious is also quite common.

Comparing the newspapers with regard to the level of fear appeals the data analysis indicates rather surprisingly that three out of the four had low levels of fear appeal of the Riyadh Newspaper materials had 67.8% (103) with a low level and 55.8% (111). The Okaz Newspaper articles were also low level. Of the Jazerah Newspaper articles 78.1% (25) had low level of fear appeals, while all the Yamamah Magazine articles had high levels of fear appeal, (see table 9).

Unlike the newspaper articles television programmes relied heavily on high levels of fear appeals. There were 87.5% (7) of the programmes with a high level, while only 12.5% (1) had a low level.

<table>
<thead>
<tr>
<th>Table 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riyadh</td>
</tr>
<tr>
<td>Low Fear</td>
</tr>
<tr>
<td>High Fear</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

3.4 - Style Of The Coverage

The style of addressing the message to the target audience is an
important element. This aspect has tended to be ignored in many other studies of the mass media. However, some studies advocate looking closely at educational programmes especially when matters of drug abuse prevention is covered. Indeed several researchers argued that it could be the most important factor for success of any drug prevention educational programmes (Kinsey, et al 1975; Mathews 1975).

The most important benefit involves attracting the attention of the target audience to the topic. Some educational drug programmes offer a routine direct message and neglect other models of style such as entertainment. Entertainment, comedy, quizzes and exciting styles in general seem to be important models and make the message easy for the target audience. In some situations the need to prevent a good style is always seen as important particularly for resistant and inattentive audiences.

In this study coding the style of the newspaper coverage was divided into four categories: first there was direct advice such as 'do not do that and if you do that this will happen to you'; second there was telling stories about drugs users and what happened to them; thirdly there was a news style and finally an academic dialogue such as takes place in seminars between students and lecturers.

Analysis of the data indicates that 59.9% (232) of the printed articles were in the so called news style, while 25.6% (99) were in direct speech. 10.9% (42) of them were story style, but only 3.6% (14) were in academic style. Comparison between the newspapers is shown in table 12.

The style of the television programmes was coded into two categories of story and dialogue. These were the only styles found in the television
programmes. These were obvious from the types of the programmes: for example the films involved stories about drug dealing or involvement with drugs, and the others were interviews. Of the programmes 62.5% (5) were in story style, while 37.5% (3) were in dialogue style (see table 10).

<table>
<thead>
<tr>
<th></th>
<th>Riyadh</th>
<th>Okaz</th>
<th>Jazerah</th>
<th>Yamamah</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct</td>
<td>18.4%</td>
<td>23.1%</td>
<td>71.9%</td>
<td>50.0%</td>
<td>25.6%</td>
</tr>
<tr>
<td>Story</td>
<td>9.2%</td>
<td>13.1%</td>
<td>3.1%</td>
<td>25.0%</td>
<td>10.9%</td>
</tr>
<tr>
<td>News</td>
<td>71.1%</td>
<td>57.8%</td>
<td>25.0%</td>
<td>25.0%</td>
<td>59.9%</td>
</tr>
<tr>
<td>Academic</td>
<td>1.3%</td>
<td>6.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Total</td>
<td>39.3%</td>
<td>51.4%</td>
<td>8.3%</td>
<td>1.0%</td>
<td>387</td>
</tr>
</tbody>
</table>

4 - The Target Audience

The most obvious target factors for mass media messages are age and gender. The public mass media is viewed by a range of audiences. They are most usually effective when their messages are aimed at and meet the needs of the whole target audience. However, a general message might be picked up by non-targeted viewers. For example, in the case of the present study when discussions about issues such as methods of taking drugs are aimed at users these could encourage some other segment of the audience, usually young people, to try drugs rather than to avoid them. The theme of the messages could be useful for one kind of receiver but not for others. For instance Kline (1978) argued that female adolescents are more likely to attend to and accumulate certain kinds of information than males.

In this study the data coding of the target audience involved four categories: the total population, youths, adults and, those who were the users
of drugs irrespective of age. Deciding on the aim of the article was crucial; the article was read by the researcher and the decision was made based on its tone and whether it was directly or indirectly targeted. For example, an article which discussed how to teach children not to become involved with drugs and not to engage with bad friends is seen to be directed at adults, and an article which discussed how to ease a drug problem and where it tried to persuade the readers to visit a specialist hospital was considered to be for drug users.

The data shows that the majority of the published articles in the Saudi Arabian newspapers and magazines were targeted at the whole population, i.e. 57.4% (222) of the total of the printed materials. In contrast 11.9% (46) were aimed at youths, while only 6.7% (26) of the materials were for adults. The articles which were targeted at drug users were 24.0% (93).

The largest percentage of printed material presented specifically at drug users in the Saudi Arabia press was in the Riyadh Newspapers, with 34.0% (53) of all their published material, The Okaz and Jazerah Newspapers aimed at about 16.0% of their published material at users. However, the Riyadh newspaper targeted the whole population with 49.3% (75) of its printed material, while Okaz and Jazerah Newspapers had around 64.0% aimed at the whole population. (see table 6)

With television the aim of the programmes was coded after watching each available programme. There was only 8 programmes. The tone and the style of the discussion of the programmes was important as a means of deciding the aims. For example, a programme which talked about 'treatment in the hospitals' and discussed confidentiality, and involved interviewing ex-users and asking how they quit was interpreted as being for drug users.
Of the 8 television programmes 3 were aimed at the whole population. Whilst the other (3) were specifically for drug users, while youth and adults had 5.9% (1) each (see table 11).

<table>
<thead>
<tr>
<th></th>
<th>All people</th>
<th>Youth</th>
<th>Adults</th>
<th>Users (n)</th>
<th>Total (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riyadh</td>
<td>49.3% (75)</td>
<td>10.5% (16)</td>
<td>5.3% (8)</td>
<td>34.9% (53)</td>
<td>39.3% (152)</td>
</tr>
<tr>
<td>Okaz</td>
<td>62.8% (125)</td>
<td>12.6% (25)</td>
<td>8.0% (16)</td>
<td>16.6% (33)</td>
<td>51.4% (199)</td>
</tr>
<tr>
<td>Jazerah</td>
<td>65.6% (21)</td>
<td>12.5% (4)</td>
<td>6.3% (2)</td>
<td>15.6% (5)</td>
<td>8.3% (32)</td>
</tr>
<tr>
<td>Yamamah</td>
<td>25.0% (1)</td>
<td>25.0% (1)</td>
<td>0.0% (/)</td>
<td>50.0% (2)</td>
<td>1.0% (4)</td>
</tr>
<tr>
<td>Total</td>
<td>57.4% (222)</td>
<td>11.9% (46)</td>
<td>6.7% (26)</td>
<td>24.0% (93)</td>
<td>387</td>
</tr>
</tbody>
</table>

**SUMMARY AND CONCLUSION**

In this chapter of the study, in order to recognise the nature of the Saudi Arabian Mass Media coverage of the drugs issue, three Arabic national newspapers, one magazine and seventeen television programmes were selected for content analysis. This chapter is descriptive. The time during which the analysis took place was from the first of January to the end of December 1991. The data of the content analysis have been obtained by close reading of each selected newspaper. The researcher looked through each newspaper during the selected period, which was from 1st January to the end of December 1991. Any article, comic, or even illustration about drugs or related to drugs was copied for the analysis.
Analysis of the data shows that the published articles about drugs in selected newspapers and magazines in 1991 came to 387. The most cover was in December with 13.4%, and in July with 12.1%.

The Okaz Newspaper had the biggest proportion among the other newspapers of published articles about drugs 51.4% (199), followed by the Riyadh Newspaper with 39.3% (152).

Collecting the data from television was by a different method. The television administration provided the researcher with a list which included all the broadcast programmes about drugs in 1991. Unfortunately not all the programmes were available for full analysis, eg for the style, themes, fear appeals etc. However time, duration, date of broadcasting type of the materials and number of repetitions were available in the provided list. The list included 17 programmes were broadcast during the year of study, 1991. Some months had more than 15 programmes in series with many episodes. It would appear that attracting the attention of the target audience is the most important key to the success of any mass media message.

Presentation of the drugs issue by the Saudi Arabian mass media, particularly the newspapers, was examined by assessing the use of pictures or illustrations, use of colours, position of the articles on the page and within the publication.

The use of pictures and illustrations in the newspapers was less than 50.0%. The only articles which appeared with photographs or illustrations were 43.1% (167) of the total of the published materials. Of these 34.4% (133) had one photograph and 5.4% (23) had two photographs, but only 2.8% (11) had three or more.
Although the Jazerah Newspaper had fewer published materials, most of them had pictures or illustrations, (75.0% or 55), while the Riyadh Newspaper had the lowest record, (27.0% or 41). This is really a surprising result. We know that the most of the Saudi Arabian newspapers readers are not older than 40 years because of the recent education system in the country. Most of the people of 40 years and over are illiterate and can not read the newspapers. So I think and expected that the newspapers would have realised where their popularity is located and what are their readers needs. Another aspect which supports my expectation is the nature of the problem itself, This problem seems to have been only recently introduced to the Saudi Arabian society, and especially among the young people, but hardly among the old people. So, accepting the argument which emphasises that the newspapers should aim at young people in their coverage about drugs, leads to searching which is the best way of presenting materials to them. And I think using pictures and illustrations seems to be more attractive.

With regard to the position of the articles, the data indicates that 56.3% (218) of the total of the materials were in the corners of pages, while only 16.8% (65) occupied whole pages.

To identify the place of the articles within the newspapers coding was divided into four categories: the first page, the back page, the first quarter and the second quarter. It was found that 69.0% (267) of the total of the printed articles were in the first quarter of the newspapers, while only 2.3% (9) were on the front pages.

The presentation of the television materials was coded according to time of broadcasting, duration of the programmes and repetition of the programmes.
The time of broadcasting was itself divided into four categories. The majority of the programmes were broadcast in the prime time for the Saudi Arabian viewers, from 6 to 10:30 o’clock in the evening, 47.1% (8).

The duration of the programmes was counted in minutes. The total time of broadcasting was 44 hours and 35 minutes. Only two programmes were repeated.

The majority of the anti-drug coverage in the Saudi Arabian Newspapers was targeted at the whole population, 57.4% (222),. There was no suggestion that the aims of these articles was towards a certain segment or group of the Saudi Arabian population. The articles which were aimed at the youth totalled 11.9% (46) while 6.7% (26) were targeted at adults, and only 24.0% (93) were specifically aimed at drug users.

In the television programmes 37.5% (3) were aimed at the whole population and another 37. % (3) were aimed at drug users, 12.5% (1) was aimed at youth and another 12.5% (1) was aimed at adults. However, I think this should not be like that for the same reasons I mentioned before, which are the kind of newspaper readers and the nature of the problem. The young people should be considered as a first priority, more important than parents or any other groups.

The themes which were found in the Saudi Arabia newspaper coverage against drugs were health factors, law and punishment, social problems, religious points of view, international events, kind of drugs, financial aspects, and more than one theme. Of the total of the printed material 40.6% (157) talked about the effect of the drugs on health, while the smallest proportion was for drug kinds, 0.8% (3).
The main themes found in the television programmes were health factors, social problems and law and penalties against drugs. Whilst 62.6% (5) of the television programmes were about health factors, and 25.0% (2) talked about law and penalties. Only 12.5% (1) was about social problems. This is quite an interesting finding to me for two reasons. First is the variety of the thematic aspects in the mass media such as health, law etc. I know the Saudi Arabian mass media has not done any research to find out the nature of their audience. So what has enabled them to get the right thematic consideration to have an effect. The only possibility, in my opinion, is that there are some officials who are working in the mass media, especially the television who obtained their professional experience in some western countries. Secondly Saudi Arabian society is still a tribal one and values traditions, such as reputation of the families for instance. That is very important for the mass media to consider. I think only 12.5% of the whole coverage materials devoted to social problems is not enough.

The content of the drugs issue in the newspaper material was mostly at a low level of low fear appeal. With 61.8% (239) of the printed materials about drugs having low fear appeals, only 38.2% (148) of them had high fear level appeals. The television programmes however relied heavily on high levels of fear appeals with 87.5% (7) of the television programmes having a high level of fear appeal, but only 12.5% (2) with low level of fear appeal. In fact this surprised me. I was expecting the newspapers to rely on high level of fear appeals, especially in a society like Saudi Arabian. This expectation is based on my experience of the literature review before collecting the data. I found many health campaigns which relied on fear appeals in the United States.
failed to achieve their goals in changing the target attitude and/or behaviours. However, there were lots of explanations behind that, such as the nature of American Society, availability of drugs, their knowledge and long history of experience with drugs. Some campaigns with fear appeals had some success, but only when they threaten with a new kind of drug unknown by the audience. None of these apply to the Saudi Arabian society because it is genuine, and the problem seem to be a recent one and the youngsters have very little experience. This coverage is the first experience for most of the Saudi Arabian pupils as we will see in the next section, so I was expecting high level of fear appeals.

The sources of information in the newspaper materials was divided into eight categories: politicians, policemen, academics, ordinary people, media editors, foreign correspondents, doctors, and religious leaders. The biggest proportion of the printed materials were written by the media editors, 30.5% (118) while the second proportion were written by doctors, 16.5% (64). Foreign correspondents had written 15.0% (58) and academics had written 14.5% (56) of the total. Each of the others had written less 10.0%. Acting in Saudi Arabian society is not a very respected profession, not like others such as scientists, academic and religious scholars. So presenting large amounts of the television materials by actors was probably not the most correct way. This view can be supported by the result which as we see in chapter six, that only a very small group of the respondents trusted actors as a reliable source of information about drugs. But what might be the reason behind that? As I said before I have not found any research in Saudi Arabian to identify the audiences and their needs, but the mass media professions and technicians rely on their
own experience. So choosing actors to deliver the drugs message through television was not base on real data. The only other reason I could think of is that there are some officials who worked in television who gained their professional experience from the west and have tried to apply that to the Saudi Arabian society without taking into account the nature of the society.

The sources of information in the television programmes were only three kinds. Of these 62.5% (5) of the programmes was broadcast by actors, 25.0% (2) was by doctors and 12.5% (1) was by drug users themselves.

The style of the newspaper coverage was obtained by coding the material into four kinds of styles: direct speech and advice, story style, news style and an academic style. The data indicates that the majority of the printed material was in news style, 59.9% (232), while 10.9% (42) was in the form of stories. Direct advice was given in 25.6% (99) and only 3.6% (14) was in academic style.

The style of the television programmes was categorised into two kinds, story style and dialogue style, with 62.5% (5) of the programmes in story style and 37.5% (3) in dialogue style. In fact I was expecting more reliance on direct speech particularly in the newspapers. That does not mean it is the right way of delivering the message. Indeed Saudi Arabia is not a very democratic society. Most of the education systems there are formal and even religious service which takes place every Friday follows the same traditional pattern. Also the structure of social life in the country is similar. Based on my own experience the young generation are strongly controlled by the older generation. So using a small proportion of direct advice and speech by the newspapers was not expected. Another thing I would like to mention here is the passivity
of the newspapers in reporting large amounts of the material as news.
CHAPTER SIX

The result of the survey
The Recipients

As an introduction to this chapter I want to give some details about the sample in the study including their gender, age, and their social classes as well as the geographical regions from which the sample was chosen. The sample was chosen randomly from Saudi Arabian pupils aged from 12 - 25 years in three geographical regions. The whole procedure is described in Chapter 2. The respondents of this study consist of 1,834 male and female pupils in schools and universities. They were taken from three regions in the country, Riyadh, Jeddah and Dammam. There were 40.3% (739) from the Riyadh Region, 38.1% were from the Dammam region and 21.6% (397) came from the Jeddah Region. Of the total sample 42.8% (785) were female. However these were not evenly distributed: there were 48.7% (360) from Riyadh, 49.7% (347) came from Dammam sample and only 19.6% (78) from Jeddah region. The reason for this has been discussed previously in the methodology chapter (see table 12).

<table>
<thead>
<tr>
<th></th>
<th>Riyadh respondents</th>
<th>Jeddah respondents</th>
<th>Dammam respondents</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>51.3% (379)</td>
<td>80.4% (319)</td>
<td>50.3% (351)</td>
<td>57.2% (1049)</td>
</tr>
<tr>
<td>Females</td>
<td>48.7% (360)</td>
<td>19.6% (78)</td>
<td>49.7% (347)</td>
<td>42.8% (785)</td>
</tr>
<tr>
<td>Total</td>
<td>40.3% (739)</td>
<td>21.6% (397)</td>
<td>38.1% (698)</td>
<td>(1834)</td>
</tr>
</tbody>
</table>

Age groups

Most of the subjects of this study were between 12 to 25 years. However some of the respondents were older than 25 years (49). I have divided
the population into four age groups. The first age group contained the young respondents from 12 to 15 years old, the second age group consisted of the respondents aged from 16 to 20 years old. Age group three contained the respondents aged from 21 to 25 years old, and the respondents aged over 25 years old were placed in age group four (see table 13).

<table>
<thead>
<tr>
<th></th>
<th>Age grp one</th>
<th>Age grp two</th>
<th>Age grp three</th>
<th>Age grp four</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>33.5%</td>
<td>64.2%</td>
<td>63.2%</td>
<td>57.1%</td>
<td>57.4%</td>
</tr>
<tr>
<td></td>
<td>(126)</td>
<td>(557)</td>
<td>(335)</td>
<td>(28)</td>
<td>(1046)</td>
</tr>
<tr>
<td>Females</td>
<td>66.5%</td>
<td>35.8%</td>
<td>36.8%</td>
<td>42.9%</td>
<td>42.6%</td>
</tr>
<tr>
<td></td>
<td>(250)</td>
<td>(311)</td>
<td>(195)</td>
<td>(21)</td>
<td>(777)</td>
</tr>
<tr>
<td>Total</td>
<td>20.6%</td>
<td>47.6%</td>
<td>29.1%</td>
<td>2.7%</td>
<td>2.7%</td>
</tr>
<tr>
<td></td>
<td>(376)</td>
<td>(868)</td>
<td>(530)</td>
<td>(49)</td>
<td>(1823)</td>
</tr>
</tbody>
</table>

The figures in the table above show that the majority of the respondents are in age group two, aged from 16 to 20 years old. Age group four, was assigned to include any respondents who were too old to fit into the other groups and the result shows that the respondents in this age group are only 2.7% (49) of the whole sample.

Social classes

It is difficult in a Saudi Arabian population to identify the socioeconomic levels of the respondents. There is no official registration dividing the population into social classes. Another such problem is that for a respondent to accept and admit to being in the lower or middle class according to his income or his wealth is very unusual. He probably believes that the status of his tribe
or reputation of his family, father and grand father, is much more valuable than any material possessions such as money or parental occupation. For example, to be classified as from the lower class using the western socioeconomic definition of income would not be acceptable to a person if he came from a famous tribe or family. He would not even recognise a multi-millionaire to be upper class who is not part of his tribe.

So for the purposes of this study, and to include the concept of social class, respondents were identified by three variables: the father's working status, their income level, and the area in which they lived in the city (see table 14).

<table>
<thead>
<tr>
<th></th>
<th>The upper class</th>
<th>The middle class</th>
<th>The lower class</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>49.9% (213)</td>
<td>53.9% (429)</td>
<td>66.7% (404)</td>
<td>57.2% (1046)</td>
</tr>
<tr>
<td>Females</td>
<td>50.1% (214)</td>
<td>46.1% (367)</td>
<td>33.3% (202)</td>
<td>42.8% (783)</td>
</tr>
<tr>
<td>Total</td>
<td>23.3% (427)</td>
<td>43.5% (796)</td>
<td>33.1% (606)</td>
<td>(1829)</td>
</tr>
</tbody>
</table>

The table above divided the respondents into three groups: upper class, middle class, and lower class respondents. The majority of the respondents are in the middle class group, 43.5% (796), 33.2% (611) are lower class, while only 23.3% (427) of the whole sample of the study can be defined as upper class.

As the sample of this study is random from the whole Saudi Arabian population aged between 21 to 25 years old, we can conclude that the majority of the Saudi Arabian pupils, 43.5% (769), in the mentioned age can be seen as
a middle class, while 23.3% (427) of the Saudi Arabian pupils are upper class. The lower class in the country are 33.1% (606) according to the result of this study.
The Survey results

The results of the survey are now presented according to the scheme established in Section one. First the recipients of the campaign message are analysed in 6 sections:

1. patterns of reading.
2. knowledge of coverage.
3. interest in the message.
4. knowledge of drugs.
5. Groups discussion.
6. present attitudes.

Each heading is further examined and cross tabulated across the three regions according to gender age and socioeconomic class.

Coverage of the anti drug issue was transmitted to the Saudi Arabian pupils through the mass media, mainly by newspapers. I shall therefore explore the relationship of the Saudi Arabian pupils with their newspapers. Initially, if it appears they are regular readers of newspapers then it would appear to be a useful means of delivering the message. If they are not, then the likelihood of reaching them is small. To assess the level of newspaper reading, three aspects were investigated:

1)- general reading of the newspapers.
2)- frequency of reading
3)- duration of reading.
Taken together these three factors will expect to show the strength or the weakness of the Saudi Arabian pupils’ relationship with the newspapers.

1- Patterns of Reading

General Reading of the Newspapers

As a first step in assessing the relationship between the Saudi Arabian pupils and the newspapers, the pupils general reading of the newspapers, not just about drugs, was examined. In the questionnaire the respondents were asked whether they read the newspapers or not, and the result is given below.

<table>
<thead>
<tr>
<th>Did read the newspapers</th>
<th>Did not read the newspapers</th>
</tr>
</thead>
<tbody>
<tr>
<td>72.8% (1314)</td>
<td>27.2% (409)</td>
</tr>
</tbody>
</table>

Table (15) shows that a high proportion of the respondents read newspapers, 72.8% (1314). It is also clear from the above that the majority of Saudi Arabian pupils aged from 12 to 25 years old also read the newspapers regularly. This first result indicates the population of this study relates quite strongly to the newspapers.

Once the proportion of general reading of the newspapers among the sample has been revealed, it is time to determine which variables have influenced it. For more convincing evidence and deeper analysis all the variables have been correlated with the respondents reading of the newspapers. The data have been treated by multiple regression to determine the relationship between the variables. It will show the most influential variables increased the
respondents reading of the newspapers, and the result is presented in table (16).

<table>
<thead>
<tr>
<th>The dependent variable in this table is reading the newspapers in general</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The independent variables</strong></td>
</tr>
<tr>
<td>Frequency of reading</td>
</tr>
<tr>
<td>Duration of reading</td>
</tr>
<tr>
<td>Specific reading about drugs</td>
</tr>
<tr>
<td>Source of information about drugs</td>
</tr>
<tr>
<td>Liking of the coverage materials</td>
</tr>
</tbody>
</table>

Added to the previous table which showed that the majority of the respondents read the newspapers, this table shows that, there is a significant relationship between the respondents reading of the newspapers and the variables listed in the table above. There are significant relationships between how often and how long individuals read the newspapers, and between these two variables and reading specifically about drugs. It seemed to be clear that the respondents who frequently read the newspapers read more than others, (2.995, p.0028). This table also demonstrates the relationship between the general reading of the newspapers and specific reading about drugs which I think emphasises the consistency between the two variables. That mean the more the respondents read the newspapers the more likely they are to read materials about drugs and to obtain information about drugs from that source. It also shows that the respondents who like the newspapers coverage materials about drugs read the newspapers generally more that those who do not.

Within the sample there are some variations by region, age, gender, and social classes with regard to their pattern of reading. It was thought to be wise to show some descriptive analysis to demonstrate these variations according to
these variables in the following sections.

**General reading in the regions**

After exploring the general reading of newspapers by all Saudi Arabian pupils it is hypothesised that there are differences between the regions. To determine whether this is so, the variables in the next two sections are all cross tabulated (see table 17).

<table>
<thead>
<tr>
<th>(Table 17)</th>
<th>Riyadh Region</th>
<th>Jeddah Region</th>
<th>Dammam Region</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did Not Read</td>
<td>27.5% (198)</td>
<td>24.2% (95)</td>
<td>28.6% (197)</td>
<td>27.2% (490)</td>
</tr>
<tr>
<td>Did Read</td>
<td>72.5% (524)</td>
<td>75.8% (298)</td>
<td>71.4% (493)</td>
<td>72.8% (1314)</td>
</tr>
<tr>
<td>Total</td>
<td>40.0% (721)</td>
<td>21.8% (393)</td>
<td>38.2% (690)</td>
<td>1804</td>
</tr>
</tbody>
</table>

\( (x^2) = 2.480, \text{ df}=2, \ P< .289. \)

The results in this section show a similar proportion of newspaper readers in all three regions, although there is a slightly higher number of readers in the Jeddah region. There appears not to be significant relationship between the reading of newspapers and living in a certain region. \( (x^2)=2.48, \text{ df}=2, \ P< .289. \) This indicates that the pupils do not differ greatly from each other as regards newspaper reading.

**Gender and general reading**

This section examines possible differences between Saudi Arabian male and female pupils and their pattern of reading newspapers. Cross-tabulation between the two variables of gender and general reading are presented in table (18):
Table (17) shows that the male respondents were most likely to read the newspapers and there were significant differences between males and females, \((x^2) = 10.3, \text{df=} 1, P < .001\). That suggests that the influence of gender is an important factor in the reading of newspapers.

### Age groups and general reading

Many studies have shown the importance of age as a variable. In this study, it was hypothesised that Saudi Arabian pupils differ from each other with regard to their general reading of newspapers according to their age. In this section I want to see if there is an association between age and reading of newspapers generally. Accordingly, the pupils were divided into four age groups: age group one = 12 - 15 years; age group two = 16 - 20 years; age group three 21-25, age group four over 25 years old (see table 19).
Table (19)

<table>
<thead>
<tr>
<th>Reading</th>
<th>Age One</th>
<th>Age Two</th>
<th>Age Three</th>
<th>Age Four</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>33.2% (122)</td>
<td>27.3% (234)</td>
<td>23.2% (121)</td>
<td>19.1% (9)</td>
<td>27.1% (486)</td>
</tr>
<tr>
<td>Yes</td>
<td>66.8% (246)</td>
<td>72.7% (624)</td>
<td>76.8% (401)</td>
<td>80.9% (38)</td>
<td>72.9% (1309)</td>
</tr>
<tr>
<td>Total</td>
<td>20.5% (368)</td>
<td>47.8% (858)</td>
<td>29.1% (522)</td>
<td>2.6% (47)</td>
<td>1795</td>
</tr>
</tbody>
</table>

\[(x^2) = 12.40, \text{ df}=3, \ P < .006.\]

Table (18) demonstrates a significant linear relationship between the age variable and general reading of newspapers, \((x^2) = 12.40, \text{ df}=3, \ P < .006.\) The percentage of older pupils who read the newspaper, i.e. age group four, is the highest, 89.9%, while as expected the lowest percentage of general reading is among the youngest, age group one, 66.8%.

This result suggests that age has some influence on the reading of newspapers.

**Socioeconomic class and general reading**

In order to explore differences between the Saudi Arabian pupils general reading of newspapers according to their socioeconomic status, a cross-tabulation between the two variables is presented in table (20).}

<table>
<thead>
<tr>
<th></th>
<th>Upper Class</th>
<th>Middle Class</th>
<th>Lower Class</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not read</td>
<td>26.7% (112)</td>
<td>24.8% (195)</td>
<td>30.6% (182)</td>
<td>27.2% (489)</td>
</tr>
<tr>
<td>Did read</td>
<td>73.3% (307)</td>
<td>75.2% (591)</td>
<td>69.4% (412)</td>
<td>72.8% (1310)</td>
</tr>
<tr>
<td>Total</td>
<td>23.3% (419)</td>
<td>43.7% (786)</td>
<td>33.0% (594)</td>
<td>1799</td>
</tr>
</tbody>
</table>

\[(x^2) = 5.86, \text{ df}=2, \ P < .532.\]
These results demonstrate that the middle and upper class respondents show little difference in their general reading of newspapers, 75.2% and 73.3% respectively. However, as expected the lower class respondents had a much smaller percentage, 69.4%. The significant differences, \( (x^2) = 5.85, \text{df}=2, P < .053 \), between these respondents indicate that socioeconomic class has some influence on the pupils relationship with newspapers. However, comparison between the middle class, 75.2%, and upper class, 73.3%, respondents is so small as not to be significant \( (x^2) = 0.53, \text{df}=1, P < .466 \). So, we can conclude that the upper class and the middle class respondents have a similar level of relationship with newspapers, while the lower class has the weakest.

### Frequency of reading newspapers

Having established the general pattern among the pupils, of reading newspapers it is now thought necessary to look at the frequency of reading. The results include those who read the newspapers only once a week as well as those who read them daily. The respondents were asked to quantify their answers by selecting one of four choices (see table 21).

<table>
<thead>
<tr>
<th>Always</th>
<th>Most of the time</th>
<th>Sometimes</th>
<th>Rarely</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.4% (255)</td>
<td>23.1% (409)</td>
<td>41.8% (739)</td>
<td>20.7% (367)</td>
</tr>
</tbody>
</table>

The above result demonstrates that quite a large proportion of the respondents read the newspapers very frequently, - 14.4% always read them and 23.1% did so most of the time. The majority of the respondents, 41.8%, read the newspapers sometimes, while 20.1% of the sample read the
newspapers rarely.

Most of the pupils 79.3%, were therefore moderate readers, (sometimes,) or more than moderate, (always and most of the time,) This could of course increase their likelihood of being affected by the media.

The descriptive analysis above determined and revealed the respondents frequency of reading. It shows how often they read the newspapers in general. It is important now to show how the respondents frequency of reading related to other variables in the study. In doing that the respondents frequency of reading of the newspapers has been correlated with other variables to show which is the most related to it. The multiple regression analysis has been used to determine which variable is the most influential on the respondents frequency of reading of the newspapers The result is presented in the table (22).

<table>
<thead>
<tr>
<th>Table (22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The dependent variable in the table is frequency of reading</td>
</tr>
<tr>
<td>The independent variables</td>
</tr>
<tr>
<td>General reading of the newspapers</td>
</tr>
<tr>
<td>Specific reading about drugs</td>
</tr>
<tr>
<td>Recalling of the coverage materials</td>
</tr>
</tbody>
</table>

All the variables in the questionnaire have been correlated with the respondents frequency of reading of the newspapers by multiple regression analysis. However the result shows that the variables listed in the table are the only variables which have a significant relationship with it. The result shows that there seems to be a reciprocal significant relationship between the respondents reading of the newspapers and reading them frequently. That means the respondents who read the newspapers seem to read them more
frequently, (0.0057). Also it shows that the respondents who usually read specifically about drugs read the newspapers more frequently as a source of information about drugs. There is a significant relationship between the respondents recalling of the coverage materials and the respondents frequency of reading of the newspapers, which means the more recall the more they frequently they read the newspapers.

Within the sample there are some variations by age, gender and social classes with regard to their frequency of reading of the newspapers. For more information about that, please see appendix 1.

Duration of reading

In this section, I will examine how long pupils spent reading newspapers. The respondents were asked to indicate their length of reading of the newspapers by selecting one of four choices: up to half an hour, half to one hour, one to two hours and more than two hours at any one time of reading (see table 23).

| (Table 23) |
|-----------------|-----------------|-----------------|-----------------|
| Up to half an hour | Half to one hour | One to two hours | More than two hours |
| 53.5% (933) | 32.5% (566) | 10.6% (185) | 3.4% (60) |

This table shows that the majority of the respondents, 53.9%, spent up to half an hour at any one time reading the newspapers, while quite a large proportion of the whole sample, 32.5%, spent up to one hour. There were 10.6% of the respondents who spent up to two hours and 3.4% spent more than
two hours reading the newspapers. The respondents duration of reading was reduced to two groupings; those who are seen to be moderate readers, i.e. up to half an hour per day, 53.9%, and those who are seen to be high readers, up to one hour per day, 46.5%. The respondents who spent up to half an hour reading the newspapers are thought to be likely to see quite a lot of the material in the newspapers. Those who spent up to one hour of reading were thought likely to see nearly all of it.

This result shows that about 50% of the sample is highly involved with the newspapers, and more than 50% had moderate involvement with the newspapers through their duration of reading of the newspapers.

For more convincing evidence the time was spent in reading of the newspapers has been correlated with all the variables to determine which one has a significant relationship with it. It has been treated by multiple regression analysis and the result is presented in the table (24).

| Table (24) |
|------------------|-----------------|
| The dependent variable is duration of reading of the newspapers |  |
| **Independent variables** | **Significance** |
| General reading of the newspapers | 0.0013 |

The table above shows that the result of the multiple regression of the respondents duration of reading of the newspapers correlated significantly with their reading of the newspapers, (3.226, p.0013). That means the respondents who read the newspapers seem to spend more time in reading them.
SUMMARY AND CONCLUSION

To evaluate the impact of Saudi Arabian mass media I have selected eight main variables in this section. The first important variable was thought to be the assessment of the nature and strength of the Saudi Arabian pupils relationship with the newspapers to determine whether they have a good chance to get the coverage information or not. The first factor was the level of general reading of newspapers. The data showed that a high proportion of the respondents, 72.8% of the whole sample, read the newspapers, which suggested a strong relationship between the Saudi Arabian pupils and the newspapers.

To examine this relationship more deeply their frequency of reading newspapers was specifically investigated. The results were categorised into three levels of reading: Those who were high level readers, 37.5% (always and most of time), those who were moderate level readers, 41.1% (sometimes), and those who were lower level readers, 21.4% (rarely).

Finally the length of time spent reading newspapers was examined. The result demonstrated that the majority of the respondents, 53.9%, spent up to half an hour per day reading the newspapers, while 32.5% spent up to one hour and only 13.6% spent more than one hour. It was thought that the respondents who spent up to half an hour per day in reading newspapers could get quite a lot of the information from the newspapers, while those who spent up to one hour could get most of the information in the newspapers. Thus, the result showed that more than 50.0% of the whole sample could get much of the information in the newspapers, while more that 40.0% of the whole sample could get most of it.

So, by assessing the nature and the strength of the Saudi Arabian pupils
relationship with the newspapers using the three indicators, we can conclude that the Saudi Arabian pupils have quite a strong relationship with the newspapers. This increases the likelihood of them attending to the messages of the newspapers prevention campaign against drugs.

Further analysis could shed some light on the strength of the relationship of the respondents general relationship with newspapers. These variables, general reading of the newspapers, frequency of reading of the newspapers and time spent in reading them have been correlated with all variables in the whole data by multiple regression analysis to determine the links between the variables, (see figure 6).

<table>
<thead>
<tr>
<th>Figure (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>This figure demonstrate the significant correlation of general relationship of the respondents with the newspapers including reading, duration and reading frequency</td>
</tr>
</tbody>
</table>

![Diagram](image)

- **read**
- **time**
- **reading frequency**
- **reading about drugs**
- **sources of information**
- **like of the coverage materials**
- **recalling of the coverage material**

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The result of the analysis demonstrates that there are reciprocal relationships between the respondents reading of the newspapers and each of their duration of reading and frequency of reading, which means the more the respondents read the newspapers the more frequently they read them and spent time in reading them. Also the result of the multiple regression analysis of reading of the newspapers has a significant relationship with the respondents specific reading about drugs in the newspapers, their sources of information about drugs, liking of the coverage and the recall variable. Also their frequency of reading has a significant relationship with their reading about drugs and their recalling of the newspapers materials.

This point needs further consideration. Indeed there is a saying that the Saudi Arabians are not reading oriented. But this result gives a different impression. It is clear from this section that the relationship between Saudi Arabian pupils and their reading of the newspapers, depth of reading and the time spent on it in general, not only about drugs, is quite strong. This means that the newspapers or any other organisation who are interested in delivering some messages to this particular age group could have a good chance of reaching them. Another thing which is noticeable in my view is the high rate of reading among the pupils especially in a society like Saudi Arabian. The education system in Saudi Arabian only began relatively recently, as did as the production of newspapers. So what then is the reason for that high rate of reading of the newspapers? In Saudi Arabia channels of information are not as wide as in modern societies such as Britain for instance. That probably pushes the pupils to seek information from the only available means such as newspapers. Another reason to be mentioned in this respect is that the society
lacks entertainment places, such as night clubs and bars where pupils could spend some time. That gives opportunities for the mass media, and the newspapers in particular, to attract pupils attention by offering a means of entertainment and a way of spending their time. And lastly the domination of the newspapers over the television with regard to their availability at any time could be one of these reasons. Television in Saudi Arabia only starts from 11 AM in the morning and closes between 1 and 2 the next morning. The newspapers in contrast are available always, and that could encourage reading them.
2. EXTENT OF THE COVERAGE

In the previous section, I tried to determine the strength of the Saudi Arabian pupils relationship with the newspapers, through their patterns of reading. In this section I want to examine whether the newspapers coverage of the drug issue has reached its target audience or not. This section explores the respondents' awareness of the newspapers coverage of the drug issue as a whole, and their depth of reading about drugs in the newspapers.

Specific reading about drugs

To determine whether the respondents specifically read about drugs, they were asked whether they read about drugs in the newspapers or not. This is one of three measures which examined the extent of the newspaper coverage of the drug issue to the Saudi Arabian pupils, i.e reading about drugs in general, the depth of the reading and the overall awareness of the coverage. The result of these three measures was counted together. The results of the first measure are given in table (25).

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read about drugs</td>
<td>83.6%</td>
<td>(1514)</td>
</tr>
<tr>
<td>Did not read about drugs</td>
<td>16.4%</td>
<td>(298)</td>
</tr>
</tbody>
</table>

This table shows that a high percentage of the whole sample read specifically about drugs in the newspapers, 86.2%, while those who did not read about drugs in the newspapers were only 16.4% of the respondents. This result gives some indication of the extent to the target audience.
Further analysis has been used to determine the relationship between the respondents' specific reading about drugs and all other variables in the study. The respondents reading about drugs have been correlated with other variables and multiple regression presents the results in Table (26).

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>General reading</td>
<td>0.0000</td>
</tr>
<tr>
<td>Frequency of reading</td>
<td>0.0009</td>
</tr>
<tr>
<td>Source of information about drugs</td>
<td>0.0007</td>
</tr>
<tr>
<td>Gender</td>
<td>0.0029</td>
</tr>
<tr>
<td>Depth of reading about drugs</td>
<td>0.0021</td>
</tr>
<tr>
<td>Awareness about the coverage</td>
<td>0.0002</td>
</tr>
<tr>
<td>Like of the coverage materials</td>
<td>0.0003</td>
</tr>
<tr>
<td>Recalling of the coverage materials</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

The result of the multiple regression in the table shows that the variables listed in the tables have a significant relationship with the respondents' specific reading about drugs. There is a clear strong reciprocal significant relationship between the general reading of the newspapers and reading about drugs. So that those who read the newspapers tend to read about drugs and at the same time those who read about drugs tend to read the newspapers in general. It is fairly obvious that frequency of reading of the newspapers and source of information have their influence on the respondents reading about drugs; that means that the respondents who read the newspapers more frequently read more specifically about drugs. The result also shows a significant relationship between gender variable and the respondents' specific reading about drugs, (2.17, p.0296). To distinguish between the males and the females in this respect and which of them read more, cross-tabulation analysis, has been used. The result shows that the
male respondents read specifically about drugs, (84.5%), more than the female respondents, (82.3%).

It also appears from the table that the respondents who read more deeply tend to read about drugs more than others who do not. The respondents awareness, as well as their liking of the newspapers coverage, also has a significant relationship with their specific reading about drugs in the newspapers, which means that the chance of reading about drugs among those who were aware of and like the coverage is more than among those who do not. The table shows that the respondents recall of the coverage materials has a significant relationship with the respondent’s specific reading about drugs, which means it has some influences on increasing the chance of reading about drugs.

**Depth of reading about drugs**

As mentioned at the beginning, the main aim is to examine whether the newspaper coverage has reached its target audience or not. In the previous section I examined levels among the Saudi Arabian pupils for reading about drugs. In this section the aim is to assess which groups have been reached by newspapers. To do that the respondents were asked how deeply they read the articles about drugs in the newspapers. They were given three choices of: whether they read it all, whether they skimmed through it or whether they did not read it. The result is presented in table (27).

<table>
<thead>
<tr>
<th>Read it</th>
<th>Skim through It</th>
<th>Do not read it</th>
</tr>
</thead>
<tbody>
<tr>
<td>57.6%</td>
<td>33.8%</td>
<td>8.6%</td>
</tr>
<tr>
<td>(1040)</td>
<td>(610)</td>
<td>(156)</td>
</tr>
</tbody>
</table>
The table above shows that the majority of respondents read articles about drugs in the newspapers, 57.6% (1040). Respondents who simply skimmed through the items about drugs are 33.8% (610), while those who did not read them at all are only 8.6% (156) of the sample. It is hypothesised that those who just skim the article would not get much information, while those who read it all would get more information.

For more investigation and deeper analysis the respondents depth of reading about drugs has been correlated with other variables to determine which of these variables has more influence on it. The multiple regression analysis will summarise and present the result in table (28).

<table>
<thead>
<tr>
<th>The independent variables</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.0009</td>
</tr>
<tr>
<td>Gender</td>
<td>0.0006</td>
</tr>
<tr>
<td>Socio-economic</td>
<td>0.0001</td>
</tr>
<tr>
<td>Belief</td>
<td>0.0124</td>
</tr>
<tr>
<td>Specific reading about drugs</td>
<td>0.0041</td>
</tr>
</tbody>
</table>

In the table above the result of multiple regression analysis shows that the respondents depth of reading about drugs is correlated with all the variables listed in the table. That means those who read more deeply about drugs tend to be middle class males aged between 16 to 25 years old. Also they seem to be those who read specifically and believe what they read about drugs in the newspapers.

In order to determine the differences between the males and the females with regard to their depth of reading about drugs in the newspapers cross-tabulation
analysis shows the result in table (29).

<table>
<thead>
<tr>
<th></th>
<th>Read it</th>
<th>Skim med through it</th>
<th>Did not read it</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Males</strong></td>
<td>54.5% (565)</td>
<td>37.3% (387)</td>
<td>8.2% (85)</td>
<td>57.4% (1037)</td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td>61.8% (475)</td>
<td>29.0% (223)</td>
<td>9.2% (71)</td>
<td>42.6% (769)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>57.6% (1040)</td>
<td>33.8% (610)</td>
<td>8.6% (156)</td>
<td>1806</td>
</tr>
</tbody>
</table>

(x²) = 13.66, df=2, P < .0010.

The difference between the respondents' depth of reading items about drugs in the newspapers and gender is significant, (x²) = 13.6, df=2, P < .001, The result shows that the male respondents read articles about drugs more deeply than did the females.

Also differences between the age groups with regard to depth of reading about drugs can be revealed by cross-tabulation analysis. It will compare between them and show which age group reads more deeply about drugs. The result is presented in table (30).

<table>
<thead>
<tr>
<th></th>
<th>Age grp one</th>
<th>Age grp two</th>
<th>Age grp three</th>
<th>Age grp four</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Read all of it</strong></td>
<td>67.6% (250)</td>
<td>57.7% (492)</td>
<td>51.3% (269)</td>
<td>42.9% (21)</td>
<td>57.5% (1032)</td>
</tr>
<tr>
<td><strong>Skim through it</strong></td>
<td>21.4% (79)</td>
<td>33.8% (288)</td>
<td>41.6% (218)</td>
<td>44.9% (22)</td>
<td>33.8% (607)</td>
</tr>
<tr>
<td><strong>Did not read it</strong></td>
<td>11.0% (41)</td>
<td>8.5% (72)</td>
<td>7.1% (37)</td>
<td>12.2% (6)</td>
<td>8.7% (156)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>20.6% (370)</td>
<td>47.5 (852)</td>
<td>29.4% (524)</td>
<td>2.7% (49)</td>
<td>1797</td>
</tr>
</tbody>
</table>

(x²) = 44.80, df=6, P < .0001.

The differences between age and the respondents' depth of reading about
drugs in the newspapers is significant, \( (x^2) = 44.8, df=6, P < .0001 \). Table (38) shows that age group four, the oldest, had surprisingly the lowest level of depth of reading about drugs, while there are smaller differences between age groups two and three. Age group one, the youngest showed the highest level of reading all of it. However, by adding together the results in two categories, those we can call 'reading all of it' and 'skimming it', it is age group three (21 to 25 years old) which is the most reached by the coverage. This is followed by age group two (16 to 20 years old), while age groups one and four show a higher percentage who did not read it at all.

The differences between the social class depth of reading about drugs can be determined by cross-tabulation analysis to show which class read more deeply about drugs. The cross-tabulation between socio-economic variable and depth of reading presents the result in table (31).

<table>
<thead>
<tr>
<th></th>
<th>Upper Class</th>
<th>Middle Class</th>
<th>Lower Class</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Read it</strong></td>
<td>52.8% (223)</td>
<td>56.0% (440)</td>
<td>62.9% (373)</td>
<td>57.5% (1036)</td>
</tr>
<tr>
<td><strong>Skimmed it</strong></td>
<td>37.4% (158)</td>
<td>36.5% (287)</td>
<td>27.8% (165)</td>
<td>33.9% (610)</td>
</tr>
<tr>
<td><strong>Didn't read</strong></td>
<td>9.7% (41)</td>
<td>7.5% (59)</td>
<td>9.3% (55)</td>
<td>8.6% (155)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>23.4% (422)</td>
<td>43.6% (786)</td>
<td>32.9% (593)</td>
<td>1801</td>
</tr>
</tbody>
</table>

\( (x^2) = 16.53, \ df=4, \ P < .0023. \)

This table shows a significant difference between socioeconomic class and the respondents' depth of reading about drugs, \( (x^2) = 16.53, \ df=4, \ P < .0022 \). It demonstrates that middle class respondents seem to read items about drugs in the newspapers more deeply than the other classes. The upper class respondents seem to have the lowest level for depth of reading about
drugs. This result shows that the class of students most likely to be reached by the coverage, will be the Saudi Arabian middle class.

**Awareness of the coverage of drugs**

In the previous two sections we have examined the way Saudi Arabian pupils look at their reading about drugs in general and of the depth of reading about drugs in particular. This last feature examines how far the pupils have been reached by the newspaper coverage. To ascertain this, respondents were asked whether they were aware of the newspaper coverage of the drugs issue or not. The results are presented in table (32).

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were aware</td>
<td>94.2%</td>
<td>(1721)</td>
</tr>
<tr>
<td>Were not aware</td>
<td>5.8%</td>
<td>(106)</td>
</tr>
</tbody>
</table>

The above table shows that a high percentage of the respondents were aware of the newspaper coverage of the drugs issue, 94.2%, while only a small number were not.

The data also have been treated by further analysis for more convincing correlation between the respondents awareness and other variable in the questionnaire. It has been treated by multiple regression analysis and the result is presented in table (33).
The dependent variable is the respondents awareness about the coverage

<table>
<thead>
<tr>
<th>The independent variables</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.0211</td>
</tr>
<tr>
<td>Specific reading about drugs</td>
<td>0.0001</td>
</tr>
<tr>
<td>belief of the coverage materials</td>
<td>0.0062</td>
</tr>
<tr>
<td>like of the coverage material</td>
<td>0.0166</td>
</tr>
<tr>
<td>Attitudes towards drugs</td>
<td>0.0004</td>
</tr>
</tbody>
</table>

The result in the table above shows that the respondents' awareness has significant relationship with their age, reading about drugs, belief, liking and their attitudes about drugs. To reveal which age group was the most aware of the coverage cross-tabulation analysis present the result in table (34).

<table>
<thead>
<tr>
<th>Age grp</th>
<th>Age grp</th>
<th>Age grp</th>
<th>Age grp</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>Two</td>
<td>Three</td>
<td>Four</td>
<td></td>
</tr>
<tr>
<td>Aware</td>
<td>88.4%</td>
<td>94.6%</td>
<td>98.1%</td>
<td>89.6%</td>
</tr>
<tr>
<td>Not aware</td>
<td>11.6%</td>
<td>5.4%</td>
<td>1.9%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Total</td>
<td>20.4%</td>
<td>47.8%</td>
<td>29.2%</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

\( (\chi^2) = 40.03, \text{ df}= 3, P < .0001. \)

This table shows significant difference between age and the respondents' awareness of the drug issue, \( (\chi^2) = 40.03, \text{ df}=3, P < .0001 \). The differences between the age groups are large. Age group three has the highest percentage of awareness, then age group two, with age group one having the lowest percentage of awareness. So it appears that the most aware pupils about drugs with regard to their age are those aged between 16 to 25 years old.

To determine the differences between the respondents attitudes toward drugs...
with regard to their awareness \textit{t-test} analysis shows that the respondents whose attitudes were negative towards drugs seem to be more aware of the newspapers coverage, \( t(1824) = 3.95, p < .000, \).

So the respondents who were aware of the newspapers coverage of the drugs issue seemed to be those aged were between 16 to 25 years old, who read, liked and believed what they read about drugs and their attitudes are negative towards drugs.

**SUMMARY AND CONCLUSION**

In the previous section I tried to determine the strength of the general relationship between Saudi Arabian pupils and the newspapers. The result indicates a good opportunity for the pupils to get most of the newspaper coverage of the drugs issue. This section has examined whether the messages of the newspaper coverage of the drug issue have actually reached their target audience or not, i.e. an evaluation of the newspaper coverage of the drug issue. To assess whether the newspaper coverage of the drug issue reached its audience or not, three variables were examined: the pupils’ reading about drugs in the newspapers, their depth of reading about drugs and their awareness of the newspapers coverage as a whole. The result of these three investigations enabled me to conclude whether the coverage reached the pupils or not.

To examine the pupils’ specific reading about drugs in the newspapers they were asked whether they read about drugs in the newspapers or not. The results demonstrate that a high proportion of all the respondents have read about drugs in the newspapers, 83.6\% (1514).

The second section examined the extent of newspaper coverage of the drug
issue by assessing the pupils’ depth of reading about drugs. To determine that, the respondents were asked how deeply they read materials about drugs in the newspapers. They were given three choices to select from. The result of this section demonstrates that the majority of the respondents read all the items about drugs in the newspapers completely. Those who just skimmed through them were 33.8% (610), while those who did not read them at all were only 8.6% (156). The result of this section, indicates that the newspapers coverage of the drug issue did reach its target audience.

The last measure or indicator which examines whether the newspaper coverage of the drug issue has reached its target audience or not assesses the respondents’ awareness of the coverage as a whole. To assess the Saudi Arabian awareness of the coverage of the drug issue, the respondents were asked whether they were aware of the coverage or not. The result of the question demonstrates that a very high proportion of the respondents were aware of the coverage, 94.2% (1721). We can therefore conclude that the newspaper coverage of the drug issue has reached the Saudi Arabian pupils. This is a very important result in my opinion. It has been mentioned in the introductory chapter that some people regarded the coverage as a waste of time and money. But that is not true in my view, as I think reaching the pupils by the newspapers coverage is a great achievement in the prevention process. However, it can be asked what is the reason behind the high rate of reaching the pupils by the coverage. Is it because of the wide circulation of the newspapers or something to do with the pupils themselves? It is quite well known that Saudi Arabia is unique in some aspects in terms of social life. That has probably been caused by the long period of isolation from the outside
world until recently. So, this could make many things seem strange to them, although they are popular, such as the drugs issue. So large amounts of published materials about drugs might be regarded as a first experience for the pupils and attract them to absorb it. Another point I should think about is the status of the drugs within the religion and tradition of the society. In the Islamic religion dealing with drugs including using, is regarded as a serious crime and receives a heavy penalty. That could be an encouragement to read about a sensitive topic to the Saudi Arabian pupils. There is an interesting point that should be mentioned here. In Britain for instance any topic, such as sex or drugs, for example, can be discussed in any place and among any groups, while in Saudi Arabia it is really difficult to talk about such things explicitly. Indeed it may be impossible among some groups such as pupils. Mass media attention concerning drugs may lead to much more open discussion being possible for the pupils.

For more convincing evidence further correlational analysis has been used. It shows which the most variables have the most correlation with the respondents such as the extent of the coverage variable including the specific reading about drugs, depth of reading about drugs and the awareness of the coverage by the newspapers. For that the data have been treated by multiple regression analysis between each of these variables and all the variables in the study. The result is summarised and presented in figure (7).

The diagram demonstrates that the association between the three variables themselves are significant and they are correlated to each other, which means those who read about drugs read more deeply about them and vice versa. Also those who read about drugs were aware of the drugs coverage and vice versa.
The diagram also demonstrates that there are quite a large number of variables correlated with the respondents extent of the coverage. Reading specifically about drugs seemed to be the most variable have among the three have effected. So the respondents who read specifically about drugs tend to be male pupils aged 16 to 25 years old who read more frequently. He seems to like and believe what he reads about drugs and obtains his knowledge from the mass
media and has ability to recall the materials presented in the newspapers. The depth of reading about drugs also has a fairly good correlation with other variables. The diagram demonstrates that those who read deeply about drugs are middle class males aged between 16 to 25 years. He seems to like the coverage and believe what he reads about it. The last variable, awareness, also has a significant correlation with five other variables. The most aware respondents tend to be that whose aged between 16 to 25 years old who read about drugs and like and believe what they read and have negative attitudes towards drugs.
3. INTEREST IN THE NEWSPAPER COVERAGE

In the previous two sections, I tried to show that the newspaper coverage of drug issues reached its target audiences. I found that a high proportion of the pupils were aware of the drug coverage in the newspapers. However, it can be argued that, although reaching the target audience with the message, it is not necessarily enough to persuade them or change their knowledge and attitudes. Perhaps the programme’s messages are not interesting enough to attract the attention of the audience or maintain their interest.

In this section I shall assess whether the newspaper coverage of the drug issue is interesting to the pupils or not. Do they accept and like the newspapers presentation of the messages. It was hypothesised that if the pupils were interested and liked the manner of the presentation, it could attract their attention and they would believe the information accordingly.

To assess this, the respondents were asked whether they liked the newspaper presentation of the drug messages and whether they believed the messages and accepted the information about drugs as facts.

Liking the newspaper coverage

The pupils liking of the newspapers’ method of presentation of the messages about drugs is one of three indicators in this section concerned with whether the pupils are interested in the media coverage. To examine whether the pupils liked the newspaper coverage, the respondents were given four choices to select from: very good, good, not very good and do not know (see
The table above shows that the majority of the respondents regarded the newspapers coverage of the drug issue as good, 53.0% (963) while 21.0% (380) regarded it as very good. Those who said the newspaper coverage was not very good constituted only 10.1% (183) and those who were undecided were 15.7% (284) of the whole population. That result shows that more than 74.0% of all the respondents liked the ways the newspapers covered the drug issue. For further investigation and deeper analysis the respondents liking of the newspapers coverage has been correlated with other variables to determine which of them has a significant relationship with it. For that the data have been treated by multiple regression analysis to show which of the variables have some influences on the respondents liking of the coverage, and the result is presented in table (36).

<table>
<thead>
<tr>
<th>Excellent</th>
<th>Good</th>
<th>Not very good</th>
<th>Did not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.0% (380)</td>
<td>53.3% (965)</td>
<td>10.1% (183)</td>
<td>15.7% (284)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The independent variables</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>General reading of the newspapers</td>
<td>0.0013</td>
</tr>
<tr>
<td>Specific reading about drugs</td>
<td>0.0007</td>
</tr>
<tr>
<td>Depth of reading about drugs</td>
<td>0.0174</td>
</tr>
<tr>
<td>Awareness of the coverage</td>
<td>0.0211</td>
</tr>
<tr>
<td>Belief of the coverage materials</td>
<td>0.0000</td>
</tr>
<tr>
<td>Recall of the coverage</td>
<td>0.0117</td>
</tr>
<tr>
<td>Attitudes toward drugs</td>
<td>0.0058</td>
</tr>
</tbody>
</table>
The result in the table above shows that the respondents liking of the coverage has a significant relationship with many important variables. It shows that the respondents liking of the coverage has quite a strong significant relationship with their belief of the materials. It is also clear from the table that general reading, specific reading about drugs, depth of reading about drugs and awareness about the coverage significantly associated with the respondents liking of the coverage. This result suggested that these variables increased the likelihood of the respondents liking the coverage materials in the newspapers. The result also indicates that the respondents who recall the materials and whose attitudes were negative about drugs seem to like the coverage more than those who do not.

Belief in the messages

This section is concerned with the second sub aim. It will examine the pupils belief of information concerning drugs presented to them through the newspapers. The respondents were asked to indicate how strongly they believed what had been written about drugs in the newspapers. They were asked to choose out of four categories - i.e. those who strongly believe it, those who believe it, those who did not believe it and those who did not know. Results are presented in table (37).

<table>
<thead>
<tr>
<th>Strongly believe it</th>
<th>Believe it</th>
<th>Did not believe it</th>
<th>Did not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.5% (462)</td>
<td>57.9% (1047)</td>
<td>1.9% (35)</td>
<td>14.6% (265)</td>
</tr>
</tbody>
</table>

The table above shows that the majority of the respondents believe
what has been written in the newspapers about drugs. Those who did not believe the materials about drugs were only 1.9% of the whole sample, while those who were undecided were 14.6% of all the respondents. This result indicates that most are interested in the coverage and it supports the result the data provided above.

To bring more convincing evidence further analysis has been used. It will determine which variables are most correlated with the respondents' belief of the coverage materials. For doing that multiple regression analysis has been run between all the variables in the study and the respondents belief of the coverage materials, and the result is presented in table (38).

<table>
<thead>
<tr>
<th>Table (38)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The dependent variable is the respondents' belief of the coverage materials</td>
</tr>
<tr>
<td>The independent variable</td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>Depth of reading about drugs</td>
</tr>
<tr>
<td>Awareness of the coverage</td>
</tr>
<tr>
<td>Liking of the coverage</td>
</tr>
<tr>
<td>Recall of the coverage materials</td>
</tr>
<tr>
<td>Attitudes toward drugs</td>
</tr>
</tbody>
</table>

The result of the multiple regression analysis in the table above shows that the respondents' belief of the coverage has significant relationships with many variables. It shows that the respondents who read more deeply about drugs tend to believe the materials more than those who do not. To show the comparison between the two groups cross-tabulations between the respondents belief and their depth of reading take place. The result shows significant associations between the two variables, ($x^2 = 107$, df = 1, p < .000). It shows that 86.5% of those who read the articles about drugs believe the materials,
while 13.5% of them do not. In contrast, 53.9% of those who do not read the coverage materials believed the materials, while 46.1% do not. This result emphasises and adds some value to the result of the multiple regression between depth of reading about drugs and the respondents' belief of the coverage materials.

The result in the table above also shows that the respondents' belief of the coverage materials has significant relationship with their awareness about the newspapers' coverage. That means the respondents who are aware of the coverage are more likely to believe its materials than others who were not aware of the coverage.

The respondents' liking of the coverage and their belief were meant to be the measure of the respondents' interest in the coverage. The result of multiple regression in the table above show that there are strong significant relationships between these two variables, which means that those who like the coverage materials tend to believe what they report.

The respondents' recalling of the coverage materials and their attitudes toward drugs have significant relationships with their belief of the coverage. So those who recall and whose attitudes were negative about drugs seemed to believe the materials about drugs more than others.

**Source of information**

This section is related to the respondents' interest in the newspapers' coverage of the drugs issue. The respondents' faith in the source of information will have quite a strong influence on their belief. It is hypothesised that the most trusted sources are likely to be the most influential ones. To test this hypothesis, the respondents were asked to select which kind of writers they
trusted the most and whether they think the writer will tell the truth about drugs. Results are given in the table below. In that table the figures do not add up to 100% because the respondents can select more than one source (see table (39).

<table>
<thead>
<tr>
<th></th>
<th>teacher</th>
<th>actor</th>
<th>religious leaders</th>
<th>policeman</th>
<th>politician</th>
<th>doctor</th>
<th>all</th>
<th>none</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13.7%</td>
<td>3.7%</td>
<td>59.1%</td>
<td>36.6%</td>
<td>8.6%</td>
<td>37.4%</td>
<td>11.1%</td>
<td>5.0%</td>
</tr>
<tr>
<td></td>
<td>(251)</td>
<td>(67)</td>
<td>(1083)</td>
<td>(671)</td>
<td>(158)</td>
<td>(685)</td>
<td>(204)</td>
<td>(91)</td>
</tr>
</tbody>
</table>

The result shows that the most trusted sources are the religious writers, 59.1% (1083). The pupils seem to believe what they write about drugs more than any one else. At the same time policemen and doctors have quite a high reputation, while the lowest groups are politicians and actors.

**SUMMARY AND CONCLUSION**

In this section, the Saudi Arabian pupils interest in the newspaper coverage of the drug issue has been assessed. The last two sections have determined the relationship of the students with the newspapers in general and whether the messages about drugs have reached them. To assess the pupils interest in the newspaper coverage, two measures were used. The first is whether the respondents liked the newspapers in terms of their presentation of the messages and the second one is their belief in the information being presented to them. It was hypothesised that if the pupils like the way the messages are presented and believe them, this shows that they are interested in its coverage.
To measure the respondents’ liking of the newspapers’ presentation of the messages, they were asked to select from four choices: excellent, good, not very good and do not know.

The second aim was to assess the respondents’ belief in the coverage. The result shows that 21.0% of the whole sample chose excellent and 53.3% chose good, which means a high proportion of them liked the newspaper presentation of the drugs materials. Adding up the respondents who think the presentation is excellent together with those who think it is good shows that the majority of the respondents liked the newspapers presentation. The second criterion to determine the interest of the pupils in the coverage, was belief of the materials about drugs. This shows that a large proportion of the respondents believed the drugs materials in the newspapers. This indicates that a high proportion of the Saudi Arabian pupils are interested in the newspaper coverage of the drug issue.

For deeper analysis the variables, liking and belief, have been correlated with the respondents’ interest and to other variables in the questionnaire to determine which of them have most influence on the respondents liking and belief. The multiple regression summarises the relationship in this context. (see figure 8)

The diagram demonstrates that there is quite strong reciprocity relationship between the respondents liking and belief of what has been reported by the newspapers about drugs. That means those who liked the newspaper coverage believed what they read about drugs and vice versa. Also the diagram shows that the respondents liking of the newspaper coverage has a significant relationship with the respondents’ general reading, specific reading about drugs.
This diagram demonstrates the respondents' interest's variables correlations with other variables.

And their awareness of drugs. That result indicates that the respondents who read the newspapers and read specifically about drugs and were aware of the coverage tend to like the material about drugs in the newspapers. Also the diagram demonstrates that depth of reading about drugs and awareness of the coverage have significant relationship with the respondents' belief of the coverage. The respondents recalling and their attitudes also have significant relationship with their belief of the newspapers coverage about drugs. The respondents who tend to believe the newspapers' coverage are those who read deeply about drugs, were aware of the coverage, recall the materials and their...
attitudes were negative about drugs.

The result in this section means to me that the pupils are keen and willing to know about drugs. The reason for this can be justified in my opinion by some of the reasons mentioned before, such as lack of experience and knowledge about drugs among the pupils. It also can be attributed to the advantage of the newspapers themselves, as reliable sources of information about drugs among the pupils at that age. However, it is interesting to mention that it is quite common in any discussion, formal or informal, about the Saudi Arabian mass media, particularly the newspapers, that they are accused of being passive and unreliable. That can be seen clearly among the students who have been abroad for education. So, what makes the pupils have different attitudes to the media in this section. In my opinion, the difference between the two groups in experience, education level and age could help to provide an explanation. Although there is no real academic data to support the accusation of the mass media being passive, experience and direct observation can be reliable in my opinion. Another point which could explain the variation between the two groups is the difference between the matters they are talking about. Those who accuse the mass media are usually talking about political aspects, while the pupils are talking about a social problem, drugs.
4. KNOWLEDGE OF DRUGS

Sections one, two and three assessed the extent of the drug messages to the audience and their interest in the topic. This section aims to assess the impact of these messages on the target audience’s knowledge of drugs. In many cases although the messages may reach the target audience, their knowledge will not be increased. In some cases, although knowledge is increased, it will be remembered for only a short time. A positive impact of the message on the target audience’s knowledge should have a strong effect on the respondents’ attitude towards the topic. This would be especially so if they are able to maintain and recall the material. This section will examine whether the respondents’ exposure to the newspaper messages has had some impact on their knowledge and whether that knowledge has been maintained and can be recalled or not.

Assessing the respondents’ knowledge of drugs can be accomplished by examining 3 factors. First the respondents’ existing general knowledge about drugs; second the kinds of drugs they know, and third their ability to maintain and recall the drugs by the names used in the newspapers. These should reveal and clarify the pupils’ knowledge about drugs.

Knowledge of drugs

To assess the respondents’ knowledge of drugs they were asked quite straightforwardly whether they had any knowledge of drugs or not. The result is presented in table (40).
The table above shows that the majority of the respondents know about drugs, 98.4% (1802), while only 1.4% (25) admit to not knowing anything about drugs. This result does not guarantee that the respondents’ knowledge of drugs comes from the mass media in general and the newspapers in particular, as it could be from other sources.

It was hypothesised that reading about drugs in the newspapers would have a significant effect on the pupils’ knowledge of drugs. To examine this hypothesis, the respondents’ reading about drugs and their knowledge of them have been cross tabulated. The result is presented in table (41).

<table>
<thead>
<tr>
<th>(Table 41)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Do know about drugs</td>
</tr>
<tr>
<td>Don’t know about drugs</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

\((x^2) = 20.03, df=1, p < .0001\)

The difference between the respondents’ specific reading about drugs and their knowledge of drugs is significant, \((x^2) = 20.03, df=1, p < .0001\). There were 4.1% (12) of the respondents who have not read about drugs in the newspapers and do not know about drugs, while only, 0.8% (12) of those who
have read about them said they do not know about drugs. This result emphasises the influence of reading about drugs on the respondents' knowledge of drugs.

Examining the general reading of newspapers together with the respondents' knowledge of drugs does not indicate a significant difference between the two variables, \( \chi^2 = 2.5, \) df=1, \( p < .107 \). This suggests only a minor influence of respondents' general reading on their knowledge of drugs.

To assess the respondents' awareness of the newspaper coverage of the drugs issue and its effect on their knowledge of drugs, the results of both these sections have been cross tabulated and are presented in table (42).

<table>
<thead>
<tr>
<th>Aware of coverage</th>
<th>Not aware of coverage</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know about drugs</td>
<td>99.3% (1703)</td>
<td>89.5% (94)</td>
</tr>
<tr>
<td>Do not know about drugs</td>
<td>0.7% (12)</td>
<td>10.5% (11)</td>
</tr>
<tr>
<td>Total</td>
<td>94.2% (1715)</td>
<td>5.8% (105)</td>
</tr>
</tbody>
</table>

\( \chi^2 = 75.7, \) df=1, \( p < .0001 \).

The difference between the respondents' awareness of the newspaper coverage of the drugs issue and their knowledge of drugs is highly significant, \( \chi^2 = 75.7, \) df=1, \( p < .0001 \). The knowledge of drugs among those who are aware of the coverage is higher among those who are not aware of the coverage. The result indicates that an awareness of drugs increases the pupils' knowledge.

The differences between the respondents who believe the coverage about drugs and those who do not is highly significant, \( \chi^2 = 59.5, \) df=2, \( p < .0001 \). The more the respondents believe the coverage, the more they are knowledgable.
about drugs. This emphasises the influence of the newspaper coverage on the pupils' knowledge of drugs.

Examining the respondents' views of the newspaper coverage and the presentation of the messages to the audience, together with the respondents' knowledge of drugs, adds more evidence about the newspapers influence on pupils' knowledge of drugs. Cross-tabulations between the two variables demonstrates significant differences between those who like the coverage and those who do not or do not know about it, \((x^2) = 12.39, \text{ df}=1, p<.0004\). Those who like the newspaper coverage of the drugs issue are more knowledgable about drugs than those who do not.

The above result applies to all the Saudi Arabian pupils, i.e. it does not identify differences between them according to their geographical region, gender, age or social classes. The next section will examine these aspects.

**Knowledge of kinds of drugs**

The previous section assessed the respondents' knowledge of drugs by asking them a yes/no question. This section will go more deeply into assessing the pupils knowledge of drugs. The drugs which have been presented in the Saudi Arabian newspapers are of many types and have different name both scientific and colloquial. The more the respondents can name the drugs the more they can be thought to be knowledgable about them. The respondents were asked to state all the kinds of drugs they knew. After collecting the data the answers were listed into two categories: the hard drugs and soft drugs. Hard drugs, such as cocaine, cannabis, and heroin for instance are those which would give rise to the death penalty according to Saudi Arabian Law for
smuggling into the country or a long sentence in prison for dealing or using. The soft drugs, such as prohibited tablets, barbiturates, amphetamines, tranquiliser and *khat* bring lower penalties. The frequency result is presented in table (43).

<table>
<thead>
<tr>
<th>(Table 43)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Could name hard drugs</td>
<td>Could name soft drugs</td>
</tr>
<tr>
<td>97.9% (1606)</td>
<td>2.1% (35)</td>
</tr>
</tbody>
</table>

The above table shows that the majority of the respondents are knowledgeable about hard drugs, 97.7% (1606), while only 2.1% (35) of the whole sample are able to name some of the soft kinds of drugs. All the kinds of drugs mentioned by the majority of the respondents are the most popular kinds of drugs. The respondents who can name at least one of these drugs are said to be knowledgeable about drugs.

It is clear from the table above that all the respondents can at least name one kind of drugs which they read about in the newspapers. However, the majority of the respondents, 97.7%, were able to maintain and name more than one kind which is described by the newspapers as the most dangerous drugs, such as cocaine and heroin for instance. So, based on that result, it can be concluded that the respondents are speaking a similar language to the newspapers in their coverage of the drugs issue. This could indicate that they have gained their knowledge about drugs from the newspapers.

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1) It is a small plant grows in Yemen and Somalia; and have active effects.
Sources of information about drugs

The main source of information about drugs in Saudi Arabia is believed to be the mass media. Drug prevention in the country used to be carried out secretly by the police, and there were no publications about drugs in the mass media or in the schools curriculum. However, since 1985 the Government has started to disseminate information about drugs through the mass media. This is the first time the public has received any organized materials about drugs. As a consequence many other organizations such as schools, mosques and others have started to publish posters and leaflets about drugs.

This section will examine the sources of information about drugs for the pupils. It will clarify the significance of the mass media in general as a source of information on drugs and the newspapers in particular. The respondents were asked to state as fully as possible the sources from which they believed they got their information about drugs. After collecting the data all the answers were divided into ten categories: family, mass media, television, newspapers, radio, friends, school, club, mosque and others. In order to determine the importance of the mass media in general and the newspapers in particular, these were removed from the other categories and examined separately. The result is presented in the table below where the aim is to show the significance of the whole mass media including television, radio, magazines and newspapers compared to the other sources such as families, friends and schools (see table 44).

<table>
<thead>
<tr>
<th>(Table 44)</th>
<th>The mass media</th>
<th>Other sources</th>
<th>All sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>75.5% (1289)</td>
<td>7.2% (123)</td>
<td>17.3% (295)</td>
<td></td>
</tr>
</tbody>
</table>

201
The result in the table above shows that the majority of the respondents, 72.5% (1289), get their knowledge of drugs from the mass media, while only 7.2% (123) of the sample got their information from other sources such as their families, friends, schools, mosques and others. Additionally 17.3% (295) of the whole sample got their information from both sources including the mass media.

This result emphasises the significance of the mass media as a source of information about drugs among the Saudi Arabian pupils.

Once the importance of the mass media as a whole has been determined it is important then to find the significance of the newspapers in particular. Comparison between the newspapers and the other mass media such as television, radio and magazines demonstrates the importance of the newspapers among the other media as a source of information of drugs. The result of that comparison is presented in table (45).

<table>
<thead>
<tr>
<th></th>
<th>Newspapers</th>
<th>Other media</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>80.1% (1033)</td>
<td>19.9% (256)</td>
</tr>
</tbody>
</table>

The table above shows that the respondents who gained their information on drugs from the newspapers are 80.1% (1033) of those who use any mass media for knowledge of drugs. The remainder, 19.9% (256) did not use the newspapers but the other media. There are many respondents who said they gain their knowledge of drugs from all aspects of the mass media including the newspapers. These are 53.1% (923) of the whole sample. Combining this percentage with those who used only the newspapers gives a total of 80.1%
(1033) of the whole sample who have used the newspapers for their information on drugs. From the tables above we can conclude that the mass media in general, and the newspapers in particular, seem to be an important means of delivering messages about drugs, and that the Saudi Arabian pupils have used and relied on them heavily for gaining knowledge about drugs.

**Recalling knowledge of drugs**

One of the most important points of the information-processing model, and the theoretical framework of this study, is the maintenance of knowledge and the ability to recall it. Once the respondents’ knowledge of drugs has been determined and the source of that knowledge has been clarified, it is important to know whether the respondents sustain that knowledge or not. If the message is prepared properly and the respondents have the ability to recall it then it is likely to affect their attitude. This section, therefore, examines the respondents’ recall of the newspaper coverage of the drug issue. The respondents were asked to state all the names of the drugs which had been mentioned in the newspapers. All the results were categorised into three groups when the data was collected. 1. Those who could recall nothing from the coverage material, 2. those who could recall some of it and 3. those who recall most of the material. The result is presented in table (46).

<table>
<thead>
<tr>
<th>Recall nothing</th>
<th>Moderate recall</th>
<th>High recall</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.3% (642)</td>
<td>48.9% (891)</td>
<td>15.8% (287)</td>
</tr>
</tbody>
</table>

The table above shows that the majority of the respondents are able to
recall one or two different kinds of drugs which is assessed to be moderate recall, 48.9% (891), while 35.3% (642) recall nothing from the newspaper coverage. The respondents who can recall more than three kinds of drugs are only 15.8% (287) of the whole sample. Comparing those who can recall anything from the coverage, 64.7% (1178), with those who do not recall anything, 35.3% (642) indicates that the majority of the pupils have the ability to maintain and recall the newspaper coverage of the drugs issue and that increases the likelihood of affecting their attitudes toward the drugs.

For more evidence of the knowledge gain and maintenance of that knowledge by the pupils more and deeper statistics have been used for showing more relationship between the respondents recall and the coverage variables. The respondents recalling of the drug materials have been correlated with all variables in the study to determine which variables have affected the respondents recalling of the materials about drugs. In doing that the data have been treated by multiple regression analysis to determine which variable has the most influence on the respondents recall of the coverage materials and the result is presented in table (47).

<table>
<thead>
<tr>
<th>The independent variables</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender variable</td>
<td>.0000</td>
</tr>
<tr>
<td>Frequency of reading the newspapers</td>
<td>.0012</td>
</tr>
<tr>
<td>Specific reading about drugs</td>
<td>.0000</td>
</tr>
<tr>
<td>Depth of reading about drugs</td>
<td>.0121</td>
</tr>
<tr>
<td>Belief of the coverage materials</td>
<td>.0048</td>
</tr>
</tbody>
</table>
The result in the table above shows that the respondents recall of the drugs coverage materials have some important significant relationship with the coverage variables. It show that the relationship between frequency of reading and recall is significant. So, the respondents who read more frequently in the newspapers were able to recall more materials and names of the drugs mentioned in the newspapers. It also shows that the respondents specific reading about and the depth of reading about them have significant relationship with their recall. The respondents who read about drugs and read more deeply tend to recall materials more than those who do not. Believing the coverage also has a significant relationship with the respondents, recall. The respondents who believe the materials seemed to recall more. So, that result indicate the respondents who are involved with the newspapers coverage, such as more reading, reading about drugs and believing what they read have significant positive influence on their recall of the coverage materials. The result shows that the gender variable has a significant relationship with the respondents’ recall, which means the males recall more than the females about drugs. So, the respondents who seem to recall the coverage tend to be males who read about drugs deeply and believe what they read about them in the newspapers.

**Recall and general reading**

This section will examine the effect of the respondents’ general reading of newspapers on their recall of the coverage materials. It was hypothesised that the respondents who read the newspapers regularly would recall more than those who do not read regularly. To examine this hypothesis, the respondents’ general reading and their recall of the coverage materials have been cross
The table above shows a significant difference between the newspaper readers and the non-readers in their recall of the coverage materials, \( (x^2) = 24.7, \text{df}=2, \ p < .0001 \). For example, 43.3% of the respondents who do not read newspapers regularly were not able to recall anything from the coverage materials in comparison to 32.0% (417) of the readers. Of the newspaper readers 17.7% (231) can recall three or more of the coverage materials, while only 10.9% (53) of those who do not read can recall the same quantity of kinds of drugs. This result indicates that reading the newspapers has an important influence on the respondents' recall of the coverage materials and in fact actually increases it.

**Frequency of reading and recall**

Depending on the effect of reading, it was hypothesised that the more frequently the respondents read the newspapers the more they would be able to recall the materials. To examine this hypothesis a cross-tabulation between the

<table>
<thead>
<tr>
<th></th>
<th>Read regularly</th>
<th>Do not read regularly</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recall nothing</td>
<td>32.0% (417)</td>
<td>43.3% (210)</td>
<td>35.0% (627)</td>
</tr>
<tr>
<td>Recall one or two names</td>
<td>50.3% (657)</td>
<td>45.8% (222)</td>
<td>49.1% (879)</td>
</tr>
<tr>
<td>Recall three or more names</td>
<td>17.7% (231)</td>
<td>10.9% (53)</td>
<td>15.9% (284)</td>
</tr>
<tr>
<td>Total</td>
<td>72.9% (1305)</td>
<td>27.1% (485)</td>
<td>1750</td>
</tr>
</tbody>
</table>

\( (x^2) = 24.72, \ P < .000 \)
respondents and their recall ability is presented in the table below. In this table all the categories of recall were combined into two groups and called simply recalling and non-recalling (see table 49).

<table>
<thead>
<tr>
<th></th>
<th>Always</th>
<th>Most of time</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can recall</td>
<td>74.9%</td>
<td>72.5%</td>
<td>62.7%</td>
<td>54.8%</td>
<td>65.1%</td>
</tr>
<tr>
<td></td>
<td>(191)</td>
<td>(293)</td>
<td>(460)</td>
<td>(199)</td>
<td>(1143)</td>
</tr>
<tr>
<td>Cannot recall</td>
<td>25.1%</td>
<td>27.5%</td>
<td>37.3%</td>
<td>45.2%</td>
<td>34.9%</td>
</tr>
<tr>
<td></td>
<td>(64)</td>
<td>(111)</td>
<td>(274)</td>
<td>(164)</td>
<td>(613)</td>
</tr>
<tr>
<td>Total</td>
<td>14.5%</td>
<td>23.0%</td>
<td>41.8%</td>
<td>20.7%</td>
<td>1756</td>
</tr>
<tr>
<td></td>
<td>(255)</td>
<td>(404)</td>
<td>(734)</td>
<td>(363)</td>
<td></td>
</tr>
</tbody>
</table>

\( (x^2) = 39.3, \, df=3, \, p<.0001. \)

The table above shows significant differences between the respondents’ frequency of general reading of the newspapers and their recall of the coverage materials, \( (x^2) = 39.3, \, df=3, \, p<.0001. \). The respondents who read more frequently were able to recall the coverage materials more than those who are less frequent readers of the newspapers. For example, 74.9% (191) of those who always read are also able to recall the coverage materials. This is compared to only 62.7% (460) of those who read the newspapers sometimes.

**Specific reading of drugs and recall**

This section will examine the effect of the respondents’ specific reading of drugs on their recall of the coverage materials. It was hypothesised that the respondents who read most about drugs should remember the coverage material more than those who read rather less. To test this hypothesis the respondents’
reading about drugs and their recall ability is cross tabulated and the result is presented in table (50).

<table>
<thead>
<tr>
<th></th>
<th>Specific readers</th>
<th>Non readers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recall nothing</td>
<td>30.0% (451)</td>
<td>59.2% (174)</td>
<td>34.7% (625)</td>
</tr>
<tr>
<td>Recall one to two names</td>
<td>52.4% (789)</td>
<td>33.3% (98)</td>
<td>49.3% (887)</td>
</tr>
<tr>
<td>Recall three and more names</td>
<td>17.6% (265)</td>
<td>7.5% (22)</td>
<td>16.0% (287)</td>
</tr>
<tr>
<td>Total</td>
<td>83.7% (1505)</td>
<td>16.3% (294)</td>
<td>1799</td>
</tr>
</tbody>
</table>

\[(x^2) = 94.42, \text{ df}=2, \quad P<.0001.\]

The table above shows highly significant differences between the respondents’ reading about drugs and their recall of the coverage materials, \((x^2) = 94.42, \text{ df}=2, \quad P<.0001.\) The respondents who read about drugs have much more recall of the material than those who do not read about drugs. For example, 59.2% (174) of the respondents who do not read about drugs cannot remember any of the coverage material compared to 30.0% (451) of the readers about drugs. Of the respondents who read about drugs 17.6% (265) can recall more than three kinds of the drugs mentioned in the newspaper coverage, while 7.5% (22) of those who do not read about drugs can do the same. This result indicates that the respondents’ specific reading of drugs has a clear effect on their recall of the coverage materials which emphasises the significance of the newspapers and their influence on the pupils knowledge of drugs.

**SUMMARY AND CONCLUSION**

In this section the respondents’ knowledge of drugs and their sources of
information have been determined. The theoretical framework of the study consists of two major steps of attitude change process. Reaching the target audience by the message and interesting them in it has been shown to lead to an increase in their knowledge of the topic. This section has assessed the other major step in that process, which is gaining knowledge and maintaining that knowledge. According to that framework the increase of knowledge and the ability to maintain and recall its material will automatically lead to a change of attitudes.

Assessing the pupils' knowledge of drugs was accomplished by asking them a yes/no question about whether they knew of drugs or not, and secondly asking them to list all the kinds and names of the drugs they knew. The results of the investigation indicate that the majority of the whole sample, 98.6% (1802), knew about drugs.

To determine whether that knowledge came from the mass media in general or newspapers in particular, the respondents' general reading was examined together with their knowledge and the result indicated no significant effect on the respondents' knowledge by general reading. Specific reading about drugs however was found to have a significant influence on the respondents' knowledge of drugs, and those who read about drugs are more knowledgable about drugs than those who do not read. Examining the respondents' knowledge together with their awareness of the newspaper coverage indicated that their awareness of the newspaper coverage of the drug issues had significant influence and increased the pupils' knowledge of drugs. The respondents' belief of the coverage material had significant influence on the respondents' knowledge of drugs, \((X^2) = 59.5, \text{df}=2, p<.0001\), and those who believed
the coverage material were more knowledgeable about drugs than those who did not. Liking the coverage had significant effect on the respondents' knowledge of drugs, \( (x^2) = 12.39, \text{df}=1, p < .0004 \) and those who liked the coverage had more knowledge of drugs. I think these results are natural and expected. All the variables mentioned above have increased the knowledge of the pupils.

Examining all these variables together with the respondents' knowledge of drugs produces enough evidence to conclude that the mass media and the newspapers in particular, by their coverage of the drugs issue, can be said to be a major source of their information and have improved the pupils knowledge of drugs which could lead to a change in their attitudes toward drugs.

The second method to assess the respondents' knowledge of drugs was to ask them about all they knew about drugs and to list all the kinds of drugs they knew. All the answers were categorised into hard and soft drugs. The result indicated that the majority of the respondents are knowledgeable about hard drugs, while only 2.1% (35) know about soft drugs.

Assessing the respondents' sources of information on drugs indicated that the mass media in general and the newspapers in particular are the most important source of information of drugs for the Saudi Arabian pupils.

Assessing the depth of the respondents' knowledge of drugs and whether they maintained that knowledge and whether they have the ability to recall it indicates that the majority of the respondents seem to have moderate levels of recalling the drug knowledge. There were 15.8% (287) with high levels of recall, while 35.3% (642) could not recall the coverage material. So, the more deeply the respondents read about drugs the more they were able to recall their materials. Examining the respondents' recall of the coverage materials together
with the respondents' general reading of the newspapers indicated that it had a significant effect on their knowledge of drugs and increased it. The frequency of reading also had significant influence on the respondents’ recall of the drugs materials. The respondents who read specifically about drugs could recall the coverage material more than those who did not, which means that specific reading of drugs highly influenced the respondents’ recall of the drugs coverage materials.

Additional to the cross-tabulation analysis between these variables and the respondents recalling, the data have been examined by deeper correlational technic statistic. To establish a more convincing relationship between the respondents recalling of the drugs coverage materials and their involvement with the newspapers coverage, multiple regression analysis have been used. All variables have been correlated with the respondents recalling. However the result indicates that the variables which have significant relationship with recall are gender, frequency of reading, reading about drugs, depth of reading about drugs and belief of the coverage materials. The result of the multiple analysis is summarised in figure (9).

The diagram demonstrates the most variables which have significant relationship with the respondents recalling of the drugs materials. In conclusion, the male respondents who read more frequently and read about drugs more deeply and like what he read tend to be the most recaller of the drugs materials mentioned in the newspapers.

Thus, the results of this section revealed a very important step in the information processing-model, as well as one important aim of this study. The Saudi Arabian pupils aged 12 to 25 years old exposure, interest including belief
This figure demonstrates the correlation between all the variables and the respondents recalling the coverage materials.

Recalling of the coverage materials

Gender variable
Frequency of reading
Reading about drugs
Depth of reading about drugs
Belief of the coverage

and liking of the newspaper coverage of the drugs issue have been determined in the last section of this chapter. This section has determined that as a consequence of that exposure to the newspaper coverage the Saudi Arabian pupils' knowledge about drugs has been increased.

So, and according to that result we can conclude that the Saudi Arabian newspapers have achieved some of their goals in increasing knowledge about drugs among a very important segment of the population. In the next section we will find out how strongly that knowledge affected the attitudes toward
drugs.

The result of this section means to me that, the Saudi Arabian newspapers have achieved some of their goals by increasing the pupils’ knowledge about drugs. It is an indication that the newspapers have educational validity among the pupils at that age, despite being passive in political issues in the view of some others. Additionally it is an indication of the background of the pupils and their ability to learn from the newspapers. It also means that when the newspapers work together with the society and support its values and traditions without any contradictory source, they can be positive sources of learning.

The reliability of the newspapers as a source of information about drugs, can be attributed to the lack of communication channels in Saudi Arabia compared to modern societies, in my view. In Britain for instance the pupils can get information from various sources such as many television channels, more newspapers and organisations, while in Saudi Arabia there are only a few newspapers and two television channels. That provides a big chance for the newspapers to dominate.
5. GROUP DISCUSSION

The questionnaires which were administered to the pupils have been supported by additional work. Initially the aim of the questionnaire was to assess the pupils’ knowledge about drugs and to measure their attitudes towards them. One of the assessment steps was to ensure that the respondents received the message about drugs and absorbed their contents. To add more validity to this eight discussion groups have been organised. The aim of the discussion group was to determine whether the pupils were familiar with the message about drugs and whether they had absorbed it or not, and if so, to what extent. The age of the groups was between 15 to 25 years old. Groups one and two were from 15 to 18 years old, while groups three, four and five were from 19 to 22 years old. The remainder, groups six, seven and eight were aged from 23 to 25 years old. The group discussion included only male pupils. The education system in Saudi Arabia does not allow males to contact females under any circumstances, so, it was impossible to organize groups of female students and discuss the drug problem with them. Each group discussed the problem based on eight guided questions and activities. Before starting the discussion each groups appointed a spokesman who was asked to start their activities. As mentioned the paper included eight required activities.

The simple objective of all of them was to determine the participants’ knowledge about drugs. Most of these requirements and questions were taken from the materials published in the newspapers in 1991 such as cartoons, headlines and articles. It was hypothesised that if the participants could find out the missing items from the activities that would mean they were familiar with
the newspaper messages about drugs. If the pupils have received and absorbed the message properly they should speak a similar language to the newspapers with regard to the drug problem. However, if they could not recognise the items and did not realise their meaning and did not speak a similar language to the newspapers that would mean they had not absorbed the newspaper message about drugs.

The first of these activities was that the participants were required to write an articles about drugs. The required article could be about any subject they chose about drugs. The second activity was similar to the first one but had a different construction. In the first question they were asked to write a proper paragraph with full sentences. However, it was thought that, even if they knew about drugs, it could be difficult for some pupils, particularly the younger ones, to write a full paragraph. So in the second question they were given an opportunity to write individual words about drugs. They were asked to write and describe drugs by individual words, as much as they can. The third requirement was to write about some behaviour and activities the participants think they associated with drug taking behaviour. This activity measured the participants beliefs and attitudes about the drugs and behaviour associated with them, and whether it was similar to the newspapers’ views or not. In their coverage of the drugs issue the newspapers portrayed drugs as evil and a gateway into many other bad things such as crime, so that question was a good opportunity to determine how the participants had absorbed the newspapers messages about drugs. In the fourth activity the participants were asked to describe the people who deal with drugs. They were asked to write individual words about people who deal in drugs. The created item would show how the
participants look at the drug dealers and users, whether positively or negatively and to what extent. It would determine whether the participants had some similarities with the newspapers towards people who use and deal with drugs or not. That was thought to be a good measure of the pupils, absorption of the newspapers message about drugs.

The fifth, sixth, seventh and eighth activities were different from the previous activities. They depended on some materials taken from the newspapers themselves in 1991. These materials were shown to the participants and they were asked to write their comment and views on them. The fifth activity was a cartoon illustration which was taken from the Riyadh Newspapers. The cartoon did not have any written statement to indicate that it was related to drugs. The participants were asked to create a suitable headline to match it. If the participants give a headline related to drugs it can be said they were familiar with the newspapers messages about drugs, because the cartoon was common in the newspapers during their coverage of the drugs issue. That was considered to be another measure to be able to determine whether the pupils have absorbed the newspapers messages about drugs or not. The sixth activity was a paragraph about drugs which was published in the Okaz Newspaper in 1991. The paragraph was carefully selected from the newspaper. Although it was about drug, it does not state that at the outset and does not talk about drugs directly. If the article was obviously about drugs, it would be easy for the participants to create a drug related headline, but this was not. It would require more knowledge and familiarity with the newspapers’ coverage to create a suitable headline. That was considered to be another assessment of the extent to which the participants had absorbed the newspapers message about drugs.
Also in the seventh activity the participants were tested for memory about a material from the newspaper. There was a cartoon taken from the Riyadh Newspaper. The cartoon also was again not obviously about drugs. It could be related to many activities such as parties, or some other habits such as smoking for instance. The participants were asked to describe that cartoon by individual words as well as they could. That made it easy for them to avoid formal writing which might have create some difficulties, particularly with the young participants. Within those descriptions if the participants mentioned drugs or any other substances related to drugs that was interpreted as an indication of the participants absorption of the newspaper messages about drugs.

The eighth and last activity involved a headline taken from the newspaper in 1991. The headline consisted of two lines. The first one was in large font, while the second was in a smaller font. The headline was quite clear about drugs, but it was of a general article and did not discuss any particular theme. The participants were asked to create a suitable paragraph to match the headline. They were expected to know and be able to write about drugs, but the most important was to determine which theme the participants understood from the drugs messages. As said above in the newspaper coverage of the drugs issue there were many themes, such as health, social effects and religion.

It is suggested that these eight activities reveal whether the participants have received and have absorbed of the newspapers messages about drugs. If the participants absorbed these messages they should be able to relate all the materials they were given to drugs, and will speak a similar language to the newspapers about drugs and people who deal with drugs.

The members of each group were selected and were asked to appoint a
spokesman from them. Then they were asked to talk and discuss freely about drugs without interference by the researcher. The discussion was guided by the above mentioned eight questions and activities. In some cases there were some arguments and disagreements between group members, but that made the discussion more interesting and encouraged the participants to talk more about drugs. The researcher took notes on their discussions. Each of the questions and activities were discussed individually and when the group finished the first activity they moved to the next one. From the group discussion it was clear that all the groups were speaking in a similar vein to the newspapers with regard to the drugs problem. They discussed the same thematic points.

In order to have a record of the group discussions, each group was given a booklet in which to record their discussions. For example, in activity number one the spokesman recorded the discussion and agreement reached on the structure of the article. If there was strong disagreement between a group members, particularly in creating a headline they were given a chance to write more than one headline. With regard to creating articles and descriptions in words there was no problem because the participants could write more than one idea or word. Disagreement only happened once that was in group seven (23 to 25 year old). The group members seemed to speak a similar language about drugs. However they were divided about creating the headline. One section spoke about drugs kindly, while the second was more hostile. In that case both headlines were accepted and documented in their paper. When the groups had completed their activities their questionnaires were analysed.

The first activity was an open question to write an article about drugs. All the eight discussion groups wrote these articles about drugs. The result
shows that the participants held similar views to that of the newspapers about drugs. None of these groups spoke positively about drugs, and they were all hostile about drugs and drug dealers. However, there were some variations in the themes and views about drugs between these groups. The groups first activities indicated that they have varied knowledge about drugs. They discussed more than one theme, such as health and social effects for instance. Yet in their articles religious consideration was obvious. For example, group six started directly by explaining how Islam has a clear attitude towards drugs and using and dealing with them. They said that "Islam protects human beings including his brain, so one of the principles was prohibiting the use of drugs". The only one group who did not mention the religious theme in their first activity was group seven. Even so they were still hostile towards drugs. Apart from this group all the groups discussion mentioned religion.

The groups also talked about drugs as an international problem. This seemed to show clear evidence of the newspapers' influence on the pupils' knowledge and views about drugs. All the groups discussed that point. Some of them attributed the problem to modern life. The social aspect was also discussed by all the groups. The groups associated drugs with social problems such as crime and family problems as did the newspapers who covered social themes very deeply. In the content analysis of the newspapers coverage of the drugs issue the social theme consisted of (22.2%) of the whole coverage materials. That can be good indication of the newspapers influence on the participants about drugs. In their discussion the participants regarded drugs as a major destroyer of family unity. For example, group one said "the drug problem is regarded as a major destroyer of family unity". They also said "the
families whose fathers commit or are involved with drugs are destroyed and it is very likely for their member to be criminal". This tone is clear existed across all groups in their first activity. Indeed some groups, such as groups two and four, started along this line. They also emphasised the effect of drug use on an increasing crime rate. All the groups discussed the relationship between drug taking behaviour and crime. They believed that drugs are associated with crime. For instance, in their first article about drugs, group seven stated that "drugs are a modern epidemic for individuals and societies and one of the most likely causes of crime". Morals were also discussed. They associated drugs with bad morals. They regarded drugs as a destroyer of morality among societies heavily involved with drugs. For example group four said that "societies which involved with drugs bring up their children with low levels of morals".

The health factor was also discussed. The groups associated drug taking behaviour with an unhealthy life style. They related drugs to epidemics, fatigue, and AIDS. The conclusion was that the groups showed in the first activity some similarities between their language about drugs with that of the newspapers. Both the newspapers and the participants discussed the drugs problem in a negative tone, and both discussed many topics such as health, religion, and social themes the same way.

The second activity was similar to the first one, but with some differences in the method. The aim of this activity was to determine the way of the participants spoke about drugs, and again whether there was similarity with the newspapers or not. It was a description of drugs, but only by words, i.e. not proper paragraphs. The participants were asked to write about drugs and describe them accordingly. The advantage here was that it gave more
freedom to the participants to write what they knew and thereby avoid difficult description. It also used a direct question if the participants misunderstood the first one. The result show that all the groups described drugs as a bad habit and they spoken in a hostile way about them. Words such as evil, crime, disease were common in the participants discussion. Obviously it was difficult to classify the themes discussed by the participants. However, there were some words which indicated thematic aspects which were discussed by the newspapers; these include health, religion, social effects and international events. For example, in group one there were many description of a religious theme such as, forbidden and evil. Also the group stated that "crime, immoral". Group seven related drugs to health such as "disease, AIDS, epidemic, poisonous". It is quite clear that most of the words appearing in the participants' activity number two had been mentioned previously in the newspapers. But the most prominent theme in activity number two was health. In every group there were more then two words indicating health factors such as disease, epidemic, AIDS. For example, all the groups mentioned that drugs are poisonous substances. Group six for instance associated drugs with bad health by four words of: "disease, poison, AIDS, and epidemic", while group two associated drugs with bad health by three words such as "poisonous, lack of health, and fatigue". Again the newspapers emphasised that point in their coverage as has been explained earlier in the content analysis chapter. AIDS for example was heavily associated with drugs by the newspapers in the coverage. This seem a clear indication that the pupils and the newspapers, thought alike which strongly suggest the pupils had absorbed the newspapers message about drugs.
The third activity was about other behaviour. It is concerned about what the participants associate with drugs. The newspapers associated drugs with negative features such as crime. Here the participants were asked to discuss some other activities and behaviour they think are associated with drugs. This question is another way of measuring pupils absorption of the newspapers’ message about drugs. Although this activity looks similar to the previous two questions, it emphasises activity and behaviour of drugs users rather than describing of drugs. Also it was a chance for some participants who many not have understood the first and the second activities to answer precisely about the features which they think are associated with drug taking behaviour.

All the groups associated drugs with bad behaviour. The answers contained many negative evaluation, such as crime, greed, selfishness. The most prominent word the participants wrote was "crime". Indeed all the groups except groups two and three started their answers to this question with the word "crime". Other aspects such as unhealthy life style, breaking religion rules were mentioned in this activity. For example, "decadent behaviour and collapsed families" were associated with drugs. This too emphasises the similarities between the participants and the newspapers about the drugs problem.

The fourth activity asked the participants to write their views of people who deal in drugs. Again it was seen as a measure of their absorption of the newspaper messages about drugs. The newspapers have portrayed people who deal in drugs as evil in many different ways. This question will determine the similarities, if any, between the participants and the newspapers.

The result show that all the groups spoke with hostility about drug dealers and users. That was so throughout. They described them as criminals
who deserved to be punished. They also described them as greedy who only thought about money regardless of the ways they obtained it. For example group one thought that the drug dealers should be executed because they were traitors and wanted to damage their society. Also group five described that in simple ways. They said "they are criminals, so we should not be kind to them because they want to destroy our young generations". They accused the drug dealers as swindlers, having no integration with their society. They believed that they have no families to look after them and they lack feeling. However, some groups, particularly groups seven and eight, indicated different views. They believe that drug users should be forced to go to hospital. For example, group seven said "the drugs users are sick and need treatment, so they should be forced to go to the hospital". That view can not been seen in younger views toward drug users. In the coverage of the drug issue the newspapers portrayed the drug dealers in similar manner to the participants. In my view that was a further indication of the similarities of the participants attitudes with the newspapers toward drug dealers and users. It suggests that the pupils have absorbed the newspapers messages about drugs.

Another measure of the pupils absorption of the newspapers’ messages about drugs was carried out by asking them to create missing parts of materials which were take from the newspapers in 1991. While the first, second, third and fourth activities depended on testing the participants’ general knowledge about drugs, this was different. It involved a photograph which was published in the Riyadh Newspapers in 1991. It was shown to the participants and they were asked to write a suitable headline to match it. The photograph did not have any words to indicate drugs relationship. The photograph was used
extensively in the newspapers. It had always been associated with AIDS and death during the coverage. It was thought that if the participants were familiar with the newspapers message about drugs they could relate that photograph with drugs. And indeed all the groups did so. The word drugs appeared in the headlines created all by the participants. However the groups varied in their level of hostility towards drugs. For example groups one, three, seven and eight related the photograph to drugs by strong words, such as "death", "epidemic", or "ending life". Only group four spoke softly about drugs in this activity. But their headline was a very common statement published in all the newspapers. It said "No to drugs". The headline created by group four, "No to drugs", was exactly similar to the newspapers statement during their coverage of the drugs issue. Sometime the newspapers put that statement as a headline on many articles about drugs. It also had been in many posters and advertising in the newspapers. It is clear from the groups headline that they related the cartoon to drug taking behaviour, which suggested their absorption of the newspapers message about drugs.

Activity number six involved a written paragraph about drugs taken from the Riyadh Newspaper in 1991. The participants were shown a paragraph about drugs and they were asked to create a headline to match it. The paragraph was not very big and did not directly indicated the drugs theme. It was hypothesised that if the participants were familiar with the coverage and with drug materials they would realize the main point from the article and relate it to drugs. The result show that all the groups without exception created drug related headlines. However, as before there were some variations in the created headline themes. Although the main theme in the created headline was drug, travelling abroad
was the second theme in these headlines. That was seen in three headlines of groups one, two and seven. For example, the headline by group seven said that, "most of the drug users adopted it from outside Saudi Arabia". Also group two stated a similar headline. They said "drugs come from outside the country". One of the groups, group four, indicated a religious theme in their headline. They stated a verse of the Koran which prohibited using alcohol and drugs. This verse was used heavily by the newspapers. Again it was thought to be an indication of similarities between the participants and the newspapers with regard to drugs problem. The participants have related the article to drugs, and indicated some themes such as international and religious aspects. That, in my view, can be an indication of the pupils absorption of the newspapers message about drugs.

The seventh activity was also about cartoon illustration. However the participants were not asked to create a headline such as in the fifth one, they were asked to describe it by individual words as much as they could. It is an opportunity to determine whether they were familiar with the newspapers message about drugs or not. It was thought that if the participants were familiar with the newspaper message they could include drugs in their description of this photograph. An interesting point in this activity is that the participants culture is clear. Most of the participants’ descriptions of this cartoon attributed it to outside influence. Indeed all the groups except the group six and seven said "foreigner or outside the country". Within the description, drugs have been associated with much unpleasant behaviour such as disorder and insincerity. Some other groups included harder words such as death, and unconsciousness in their description. In the coverage the newspapers emphasised the effect of
"foreign influence" on the drugs problem. Many articles and interviews with senior officials indicated that the drugs problem was a consequence of opening up Saudi Arabia to the outside world. Most drug dealers were thought to be foreigners again. The group used words which have similar meaning to that of the newspapers.

Activity number eight was about a headline and the participants were asked to create a paragraph to match it. The headline was selected from the Okaz Newspaper. The headline said "The effect of drugs is a flame or match blaze which does not last long". The headline can be interpreted in many different ways. The most important point is to determine whether the participants speak a similar language to the newspapers or not. The article following the headline, was about the effect of drugs on the body. The participants were not expected to write exactly about this, but the headline was an encouragement to think about drugs. The participant were given a free choice to write about this headline. Result show that overall all the groups created articles related to drugs. However there were some variations between the groups in their themes. Group five for example tried to interpret the headline by a clear warning not to approach drugs at all. They have an active negative effect which will accrue. Some groups, such as group one said "Islam strictly prohibits the use of drugs and does not tolerate people who deal with drugs". Then they said "drugs are regarded to be the most cause of social diseases". In contrast, some groups concentrated mainly on one theme, for example the group six discussed a social theme. They mentioned how using drugs leads to crime and how many families are destroyed by using them. The similarities between this and the newspapers is obvious. In the newspapers
stories about families were reported. Group three said "many wives and children have been neglected because of drugs". The health factor was also discussed and some groups gave details about the effect of drugs on the users body and brains. For example, group eight said that "activated drugs have a strong effect on the body for a short time, but the negative effect will stay longer". That is similar to many stories and articles reported by the newspapers in their coverage in 1991.

As a conclusion, the participants discussed the drug problem in the light of the eight activities. They were asked to write about drugs, and describe them by words in the first and the second activities. Then they were asked in the third and fourth activities to describe other behaviours associated with drugs and the people who deal with them. They were shown a cartoon and article from the newspapers then asked to write a headline to match it in the fifth and sixth activities. The seventh activity was also a cartoon illustration to describe it by words, while the eight and the last one was a headline to create an article to match it. The simple aims behind these activities was to determine whether the participants could relate all these materials to drugs, and whether they used similar language to the newspapers or not. All the activities created by the participants were related to drugs. They also had, on a large scale, similarities to the newspapers in the coverage of the drugs issue. That was a good indication of their receiving and absorption of the newspaper messages about drugs.
6. ATTITUDES TOWARDS DRUGS

One of the most important aims of any mass media campaign is to change the attitudes of a large proportion of its target audience toward its topic as a key factor of changing their behaviour. The theoretical framework of this study, the information-processing model, emphasises this point as a major step in the change process. The chief aims of campaigns usually are to change their target audience’s behaviour as a result of a change in their attitudes. However, assessing the subsequent behaviour of the sample population is not within the scope of this study.

The aim of the Saudi Arabian newspaper coverage of the drug issue was to improve the population’s knowledge about drugs and their danger, in an attempt to change their attitude towards the substances and to protect them from becoming involved with them. The final aim of this study is to assess the Saudi Arabian pupils’ attitudes toward drugs to see whether newspaper coverage of the drugs issue had produced the desired effect.

In the last three sections of this study I determined how the Saudi Arabian pupils were exposed to the newspaper coverage of the drugs issue, to what extent, their interest in it, and how that improved their knowledge about drugs. This section will try to examine the respondents’ relationship with the newspapers, including reading about drugs, interest in the coverage and their knowledge about drugs on one hand and their attitudes towards drugs on the other hand.

To assess the pupils’ attitudes towards drugs they were given twenty one statements on a Likert’s Scale, and they were asked to identify whether they
strongly agreed, agreed, were undecided, disagreed, or strongly disagreed with each statement. Some of these statements were favourable, positive towards drugs, such as, for instance, 'drugs are not harmful', and these scored five points for strong agreements and one for strong disagreements. The other statements were unfavourable, negative toward the drugs, such as, for instance, 'drugs are harmful', and these scored five points for strong disagreements and one for strong agreements. Thus the highest possible positive score was 105 *points* and the lowest possible score was 21 *points*. In other words the higher the score the more positive the attitude towards drugs and the lower the score the more negative the attitude.

Once the data had been collected, all the statements were treated as a block by a statistical test (*t*-test) to determine the scoring means for the whole sample and the standard deviation. The individual score of each statement is not important unless it is added to all the other statements in the questionnaire. The test will enable comparisons between the groups' attitudes according to their answers. The result of the data analysis is presented in table (51).

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Standard deviation</th>
<th>skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>(31)</td>
<td>29.0</td>
<td>21.0</td>
<td>(9.253)</td>
<td>(1.478)</td>
<td></td>
</tr>
</tbody>
</table>

The table above shows that the mean of the whole sample is (31), while the highest score of the scale of attitude is (105), and that means the scores of the majority of the sample are very much lower than the highest possible score. In fact comparison between the mean of the whole sample of this study, which is 31 with the midpoint of the scale of the attitude, which is 52.5 shows that the mean of the sample is much lower than even the midpoint of the scale.
This result means that the Saudi Arabian pupils aged from 12 to 25 years old have negative attitudes toward drugs and drugs abuse. Once the attitudes of the pupils have been determined the question must be asked: does their negative attitude toward drugs come from their exposure to the newspaper coverage of the drug issue?

**The newspapers and the pupils’ attitudes**

This section will concentrate on the influence of the newspaper coverage of the drugs issue and its variables on the attitudes of the respondents towards drugs. The previous section assessed the respondents’ attitudes in general. But that does not guarantee that the negative attitudes come from the mass media, particularly the newspapers. This section will determine whether the newspaper coverage has some influence on the respondents’ attitudes towards drugs or not. It was hypothesised that the respondents who have a strong relationship with the newspapers in general, and with their coverage of the drugs issue in particular, would have different attitudes from those who do not. To assess that, all the reading variables will be examined in this section: general reading, reading about drugs, including depth of reading about drugs and believing the drugs coverage materials, knowledge about drugs, the respondents’ awareness about the coverage, and involvement with the newspapers in general.

The respondents’ general reading of the newspapers has been examined together with their scales of attitudes by the statistical t-test to determine whether their reading of the newspapers in general has some influence on their attitudes toward drugs or not. The t-test will compare the two groups of those who read the newspapers and those who do not. The result is presented in table (52).
The result in the table above shows that the non-readers, mean =31.74, STD = 10.471, have slightly more positive attitudes towards drugs than those who read newspapers, mean = 30.78, STD = 8.79. However, despite that increase in the newspapers readers negative attitudes towards drugs, the statistical t-test demonstrates no significant differences between the two groups, t (1801) = 1.81, p < .071. So this result indicates that general reading of the newspapers does not influence the respondents’ attitudes significantly.

Going deeper and to determine the influence of the newspapers coverage of the drugs issue on the respondents’ attitudes, their specific reading about drugs has been examined with their attitudes toward drugs by t-test. The result is presented in table (53).

| (Table 52) |
|---|---|---|
| N | Mean | std |
| Read | 1314 | 31.74 | 10.47 |
| Do not read | 489 | 30.78 | 8.79 |
| t (1801) = 1.81, p,.071 |

| (Table 53) |
|---|---|---|
| N | Mean | STD |
| Read about drugs | 1514 | 30.74 | 8.92 |
| Don,t read about drugs | 297 | 30.74 | 8.9 |
| t (1809) = 2.74, p < .007 |

The result in the table above shows what the respondents who do not read the drug coverage materials in the newspapers have scored in their attitudes toward drugs, mean = 32.55, STD = 10.69, more than those who read the coverage materials, mean = 30.74, STD = 8.92,. The statistical t-test
shows that the two groups of readers and non-readers vary significantly from each other in their attitudes towards drugs, \( t(1809) = 2.74, p < .007 \).

This result indicates that the readers of the newspaper coverage of the drugs issue have less positive attitudes toward drugs than those who do not read the coverage materials, which suggests that specific reading about drugs in the newspapers among the Saudi Arabian pupils does have an effect on their attitudes towards drugs.

Further evidence of the influence of the newspaper coverage of the drugs issue on the pupils’ attitudes toward drugs can be seen by examining the respondents’ depth of reading about drugs together with their scale of attitudes towards drugs by statistical t-test. The depth of reading about the drugs variable consists of three groups of those who are seen to be high readers, those who skim through the items and are seen to be moderate readers, and those who do not read them at all and are considered to be non-readers. The t-test of these categories will determine how strongly the involvement with the drugs coverage materials could affect the respondents’ attitudes, and will find out which of these groups has more positive or negative attitudes towards drugs. The result is presented in table (54).

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>STD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read the materials</td>
<td>1040</td>
<td>30.70 ( (A) )</td>
<td>8.43</td>
</tr>
<tr>
<td>Skim through them</td>
<td>610</td>
<td>30.77 ( (A) )</td>
<td>8.58</td>
</tr>
<tr>
<td>Don’t read at all</td>
<td>155</td>
<td>34.63 ( (B) )</td>
<td>14.7</td>
</tr>
</tbody>
</table>

Means with different subscript are significantly different from each others at level .05

The results in the table above allowed several kinds of comparison
between these groups, high reader, moderate readers and the non-readers, The non-readers groups have obvious higher scoring, mean = 34.63, STD = 14.79, than each of the higher and moderate readers groups, and the statistical t-test shows significant differences between this group and each of higher readers about drugs, t (1193) = 3.24, p < .001, and the moderate readers, t-test (763) = 3.12, p < .002. The result also shows slight differences between the higher readers, mean = 30.70, STD = 8.43, and the moderate readers of the materials about drugs, mean = 30.77, STD = 8.58, and the statistical t-test shows insignificant differences between the two groups. Although the differences between the two groups is not significant, the high readers about drugs score less than the moderate readers.

The above results indicate that the respondents who read about drugs, whether high readers or moderate, have significantly less positive attitudes towards drugs. In other words the more the respondents are involved with the newspaper coverage of the drugs issue the more negative attitude toward drugs they have. This result added more proof of effects of the newspapers coverage of the drugs issue on the Saudi Arabian pupils' attitudes towards drugs.

One of the variables that we have called reading about drugs is the respondents' belief of what has been written. This can be assessed by examining the respondents belief of the newspaper coverage together with their scale of attitudes towards drugs. The coverage belief variable consists of four categories: those who believe the coverage, those who strongly believe the coverage, those who do not believe the coverage and those who do not know. The results are presented in table (55).
The table above shows that the respondents who strongly believed the newspaper coverage materials have the lowest scores in their scale of attitude towards drugs among all the other groups, mean = 29.73, STD = 8.76, and the statistical t-test between them and each of the other groups show significant differences, such as with those who do not believe the coverage materials for instance, t (495) = 3.96, p < .0001. On the other hand the respondents who do not believe the newspapers coverage materials have the highest scores in the scale of attitudes, mean = 42.74, STD = 19.29. Another comparison can be obtained by comparing the respondents who believed the coverage material, whether strongly or only just believed it, together with both those who do not believe and do not know. The result shows that the respondents who believed the coverage materials have lower scores, mean = 30.45, std = 8.50, than those who do not believe together with those who do not know, mean = 33.87, std = 11.9, and the statistical t-test shows significant differences between the two groups, t (1806) = 4.73, p < .000.

The results of the previous comparisons indicate that the Saudi Arabian pupils who strongly believed or just believed the newspapers coverage materials about drugs have less positive attitudes toward drugs than those who do not

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>STD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly believe it</td>
<td>462</td>
<td>29.73(A)</td>
<td>8.76</td>
</tr>
<tr>
<td>Believe it</td>
<td>1047</td>
<td>30.77(B)</td>
<td>8.37</td>
</tr>
<tr>
<td>Do not believe it</td>
<td>35</td>
<td>42.74(C)</td>
<td>19.29</td>
</tr>
<tr>
<td>Do not know</td>
<td>264</td>
<td>32.70(D)</td>
<td>10.04</td>
</tr>
</tbody>
</table>

Means with different subscript are significantly different from each other at level 0.05.
believe it at all or do not know. That means the newspapers coverage of the drugs issue has affected the Saudi Arabian pupils attitudes towards drugs, and this can be added to the other evidences.

In the last section of this chapter the knowledge of the Saudi Arabian pupils has been determined. It also revealed the effect of the respondents’ exposure, their interest, and comprehension and awareness of the newspapers coverage of the drug issue, on their knowledge about drugs. This section will determine whether that knowledge affected their attitude towards drugs or not. The respondents’ knowledge about drugs will be examined together with their scale of attitude in order to determine the influence of their knowledge on their attitudes towards drugs. The result is presented in table (56).

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>STD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know about drugs</td>
<td>1801</td>
<td>30.92</td>
<td>9.16</td>
</tr>
<tr>
<td>Do not know</td>
<td>25</td>
<td>35.84</td>
<td>11.49</td>
</tr>
</tbody>
</table>

\[ t (1824) = 2.13, p < .044 \]

In the table above there are two groups of the respondents: those who have knowledge about drugs and those who do not. Comparison between the two groups shows that those who are more knowledgeable about drugs have lower scores in their scale of attitude, mean = 30.92, std = 9.16, than those who are not knowledgeable about drugs, mean = 35.84, std = 11.49. The statistical t-test shows significant difference between the two groups, \( t (1824) = 2.13, p < .044 \).

This result indicates that the pupils who are knowledgeable about drugs have much less positive attitudes toward drugs than those who are not
knowledgeable about drugs. And that means the knowledge about drugs, which has been increased by the newspapers, as we have seen already in the previous section, has influenced the Saudi Arabian pupils’ attitudes toward drugs.

The last mean which could prove the influence of the newspapers coverage of the drugs issue on the pupils’ attitudes toward drugs can be seen in the effect of their awareness about the coverage on their attitudes towards drugs. Examining the respondents' awareness about the newspaper coverage together with their scale of attitude will determine the influence of their awareness on their attitudes about drugs. The result will be presented in table (57).

<table>
<thead>
<tr>
<th>( Table 57 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>Aware about the coverage</td>
</tr>
<tr>
<td>Are not aware</td>
</tr>
</tbody>
</table>

\[ t(1824) = 3.95, \ p < .000. \]

The table above consists of two groups of respondents: those who are aware about the newspapers coverage of the drugs issue and those who are not. Comparison between these two groups shows clear differences between their means and standard deviation of scoring in their scale of attitudes. The respondents who are aware of the drug coverage have much lower scores in their scale of attitudes, mean = 30.69, std = 8.65, while those who are not aware of the newspaper coverage have much higher scores, mean = 36.60, std = 15.16, and the differences between the two groups is statistically significant, \[ t(1824) = 3.95, \ p < .000. \]

This result indicates that the Saudi Arabian pupils who are aware of the drugs coverage have less positive attitudes toward drugs than those who are not
Involvement with drugs and pupils' attitudes

As mentioned before there are some other aspects which seem to be very relevant to this study such as increase of drug use among the pupils as a consequence of the newspaper coverage of the drugs issue. That aspect was determined earlier. In this section I would like to determine whether that connection with drugs, whether previous use, current use and/or even relationship with drug users have some effect on the pupils' attitudes toward drugs or not. There are four categories which will be examined here: previous use of drugs, current use of drugs, friendship or contact with ex-users and/or current users of drugs and each will be discussed individually.

This section will determine whether experience with drugs among the Saudi Arabian pupils, even in the past, has some effect on their attitudes toward drugs or not. Their experience with drugs will be examined together with their scale of attitude by statistical t-test to show the difference between those who have tried drugs and who have not. The result will be presented in table (58).

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Means</th>
<th>STD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have tried drugs</td>
<td>57</td>
<td>45.03</td>
<td>17.11</td>
</tr>
<tr>
<td>Did not tried drugs</td>
<td>1768</td>
<td>30.57</td>
<td>8.52</td>
</tr>
</tbody>
</table>

\[ t (1823) = 6.35, p < .0001. \]

The table above consists of two groups: those who have tried drugs
and those who have not. The result shows that the respondents who have tried drugs have scored much more in their scale of attitudes, mean = 45.03, std = 17.11, than those who have not tried drugs, mean = 30.57, std = 8.52. The statistical t-test, t(1823) = 6.35, p < .0001, shows highly significant differences between the two groups.

The result indicates that the Saudi Arabian pupils who have some connection with drugs have more positive attitudes toward drugs than those who have never tried drugs.

The second category of the pupils' connection with drugs is their current use of drugs. To determine whether that has any effect on their attitude toward drugs, their current use of the drugs has been examined together with their scale of attitude. The result is presented in table (59).

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>STD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are using drugs</td>
<td>31</td>
<td>49.19</td>
<td>18.76</td>
</tr>
<tr>
<td>Do not use drugs</td>
<td>1789</td>
<td>30.65</td>
<td>8.55</td>
</tr>
</tbody>
</table>

\[ t (1818) = 5.49, \ p < .0001 \]

The table above compares the two groups of the respondents: those who are currently using of drugs and those who are not. The result demonstrates that the respondents who are using drugs have much higher scores in their scale of attitude, mean = 49.19, std = 18.76, than the respondents who are not using drugs, mean = 30.65, std = 8.55., with significant differences between them, \[ t (1818) = 5.49, \ p < .0001 \].

This result means the Saudi Arabian pupils who are using drugs have more positive attitudes toward drugs more than those who are not.
The third category of the respondents' connection with drugs is their friendship or relationship to somebody else who used to use drugs or has recently used them. The respondents are divided into two groups in this matter: those who know somebody who has just stopped using drugs and those who do not know anyone. This category has been examined together with their scale of attitudes in order to determine the differences between the two groups in their attitude toward drugs. The result is presented in table (60).

<table>
<thead>
<tr>
<th>Know ex-drug user</th>
<th>403</th>
<th>33.53</th>
<th>10.81</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don't know ex-drug users</td>
<td>1417</td>
<td>30.34</td>
<td>8.64</td>
</tr>
</tbody>
</table>

\[ t (1818) = 5.45, \ p < .0001. \]

The table above demonstrates that the respondents who knew drug users have higher scores in their scale of attitude, mean = 33.53, std = 10.81, than those who do not know anyone, mean = 30.34, std = 8.64. The statistical t-test shows significant differences between the two groups, \( t (1818) = 5.45, \ p < .0001. \)

This result indicates that the Saudi Arabian pupils who know somebody who was using drugs but has now stopped, have more positive attitudes toward drugs than those who do not know anyone. And that has added evidence on how a connection with drugs has affected the pupils attitude negatively toward drugs.

The last category of the pupils connection with drugs is their friendship or relationship with somebody else who has just started using drugs. It has
been examined with their scale of attitude to determine whether it has any effect on their attitude toward drugs or not. The result is presented in table (61).

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>STD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know who has started drugs</td>
<td>227</td>
<td>35.28</td>
<td>12.92</td>
</tr>
<tr>
<td>Don't know anyone who has started drugs</td>
<td>1592</td>
<td>30.36</td>
<td>8.33</td>
</tr>
</tbody>
</table>

\[ t(1817) = 5.57, p<.0001. \]

In the table above there are two groups: those who know somebody else who has just started using drugs and those who do not know anyone. The comparison between the two groups demonstrates that those who know somebody else who has just started using of drugs score higher in their scale of attitude, mean = 35.28, std = 12.92, than those who do not, mean = 30.36, std = 8.33. The t-test indicates significant differences between the two groups, \( t(1817) = 5.57, p<.0001. \)

This result indicates that the Saudi Arabian pupils friendship or relationship to drug users has some influence on their attitudes toward drugs.

The regions and respondents' attitudes

The previous results apply to all the Saudi Arabian pupils in the country regardless of where they live. In this section comparison between their attitudes according to their geographical region will take place. This section will determine whether respondents in the three regions have different levels of attitudes towards drugs or not, and if so which of them are more positive or
negative towards drugs. The statistical t-test comparisons between the regional attitudes present the results in table (62).

<table>
<thead>
<tr>
<th>Region</th>
<th>N</th>
<th>Mean</th>
<th>STD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riyadh Region</td>
<td>738</td>
<td>30.32 (A)</td>
<td>8.72</td>
</tr>
<tr>
<td>Jeddah Region</td>
<td>397</td>
<td>32.21 (B)</td>
<td>9.68</td>
</tr>
<tr>
<td>Dammam Region</td>
<td>698</td>
<td>31.12 (B,A)</td>
<td>9.48</td>
</tr>
</tbody>
</table>

Means with different subscript are significantly different from each others at level .05.

The table above displays comparison between three different groups of Riyadh Regions respondents, Jeddah Region respondents, and Dammam Region respondents with regard to their attitudes towards drugs. The differences in scores in the scale of attitudes between the Dammam Region respondents and each of the Riyadh and the Jeddah Regions respondents seem to be little and the t-test seems not to be significant. However, comparison between the Riyadh Regions respondents, means = 30.32, STD = 8.72, and the Jeddah Region respondents, mean = 32.21, STD = 9.68, demonstrate some variations between their scoring, and the t-test shows significant differences between the two groups, t (1133) = 3.25, p < .001.

This result indicates that the Jeddah Region respondents have the most positive attitudes toward drugs in comparison to the others, while the Riyadh Region respondents have the most negative attitudes towards drugs compared to the other regions.

**The gender attitudes**

In this section the variation between the male and the female
respondents’ attitudes towards drugs will be examined. The statistical t-test comparison between the male and the female respondents will clarify which of them have more positive or negative attitudes towards drugs. The result is presented in table (63).

<table>
<thead>
<tr>
<th>(Table 63)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Mean</td>
<td>STD</td>
</tr>
<tr>
<td>males</td>
<td>1049</td>
<td>31.81</td>
</tr>
<tr>
<td>females</td>
<td>784</td>
<td>30.00</td>
</tr>
</tbody>
</table>

\[ t (1831) = 4.21, p < .0001. \]

The table above demonstrates comparison between the males and the females in their scoring of the scale of attitudes. The result shows that the male respondents have scored more, mean = 31.81, std = 9.48, than the female respondents, mean = 30.00, std = 8.83, with significant differences between the two groups by t-test, \[ t (1831) = 4.21, p < .0001. \]

This result indicates that the Saudi Arabian male pupils have more positive attitudes toward drugs than the females pupils.

**The age groups attitudes**

This section will examine the differences between the age groups of the Saudi Arabian pupils with regard to their attitudes towards drugs, and will find out which age group has more positive or negative attitudes toward drugs. That can be done by examining the age variable with the scale of attitude by the statistical t-test. The result is presented in table (64).
<table>
<thead>
<tr>
<th>Age group</th>
<th>N</th>
<th>Mean</th>
<th>STD</th>
</tr>
</thead>
<tbody>
<tr>
<td>one</td>
<td>375</td>
<td>32.41</td>
<td>10.34</td>
</tr>
<tr>
<td>two</td>
<td>868</td>
<td>31.36</td>
<td>9.30</td>
</tr>
<tr>
<td>three</td>
<td>530</td>
<td>29.71</td>
<td>8.22</td>
</tr>
<tr>
<td>four</td>
<td>49</td>
<td>28.12</td>
<td>7.62</td>
</tr>
</tbody>
</table>

Means with different subscript are significantly different from each other at level .05

It is clear in the table above that there are some differences between the means and standard deviation in the scoring in the scale of attitudes. Age group one has the highest score, mean = 32.41, STD, 10.34, then age group two, then age group three, while age group four has the lowest scoring in their scale of attitudes, mean = 28.12, STD = 7.62. However, some of these differences are not statistically significant from some other. For example, the differences between the age group one and age groups two are not significant, t-test (1241) = 1.69, p < .091, as well as the difference between the age group three and age group four, t(577) = 1.39, p < .171. On the other hand the statistical t-test shows significant differences between the age group one and each of age group three, t (903) = 4.21, p < .0001, and age group four, t(422) = 3.54, p < .001. It also shows significant differences between age group two with each of age group three, t (1396) = 3.47, p < .001, and age group four, t (915) = 2.86, p < .006.

These results in the table above indicate that the most positive attitudes towards drugs are among the younger pupils, age group one, while the older pupils, age group four, have the most negative attitudes toward drugs in comparison to the other groups. Age group two has the second most positive
attitude, while age group three has the third most positive attitude toward drugs. In other words the younger the pupils, the more positive the attitudes towards drugs.

Social class attitudes

This section will compare the Saudi Arabian pupils attitudes toward drugs according to their economic status. It will determine which of the upper class, middle class, or the lower class pupils have more positive or negative attitudes toward drugs. This can be done by examining the socioeconomic variable together with the respondents scale of attitudes by the statistical t-test. The result is presented in table (65).

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>STD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper class</td>
<td>427</td>
<td>31.81</td>
<td>10.30</td>
</tr>
<tr>
<td>Middle class</td>
<td>796</td>
<td>30.51</td>
<td>8.32</td>
</tr>
<tr>
<td>Lower class</td>
<td>605</td>
<td>31.17</td>
<td>9.60</td>
</tr>
</tbody>
</table>

Means with different subscripts are significantly different from each others at level 0.0.5

The table above displays three different means of three different groups of the upper class, the middle class, and the lower class respondents in their scale of attitudes toward drugs. Comparison between these three groups demonstrates that the upper class respondents have the highest scoring, mean = 31.81, std = 10.30, while the lower class come second, 31.71, std = 9.60, with slight insignificant differences between these two groups. The middle class respondents have the lowest level of scoring among all the other groups in the
scale of attitude, mean = 30.51, std = 8.32, with statistically significant differences with the upper class respondents, t (1221) = 2.25, p < .025, but not with the lower class respondents, t (1399) = 1.36, p < .175.

This result indicates that the Saudi Arabian upper class pupils aged 12 to 25 years old have the most positive attitudes towards drugs, while the lower class pupils have the second most positive attitude toward drugs. The middle class pupils have the most negative attitudes toward drugs in comparison to the other two classes.

**SUMMARY AND CONCLUSION**

The Saudi Arabian Government aims, in launching campaigns against drugs in the mass media and in the newspapers in particular, were to improve the population awareness of the dangers of drugs in order to protect them. The main aim of the coverage was to change the population’s attitudes towards drugs. According to the theoretical concepts of this study, changing the attitudes is a major key for changing the target audience behaviour, which is believed to be the main aim of any educational programme. The other points, such as reaching the target audience by the coverage messages and changing their knowledge, have been assessed previously.

This chapter has assessed the Saudi Arabian pupils' attitudes towards drugs, and determined whether they are positive or negative towards drugs or not. Assessment of the respondents’ attitudes was done by using the Likert’s Scale of attitudes. According to that scale, the highest possible positive attitude scores were 105, whereas the lowest possible positive attitude scores were 21.

The results of the data analysis show that the respondents’ scores mean
is (31), STD = (9.25) and skewness = (1.474). According to this result we can conclude that the attitudes of all the pupils aged from 12 to 25 years old can be said to be negative towards drugs.

Examining respondents’ attitudes towards drugs in the three regions indicates that the Jeddah Region respondents have the most positive attitudes, and the Dammam Region respondents have the second, while the Riyadh Region respondents have the least positive attitudes towards drugs.

Examining the gender variable with the respondents’ attitudes towards drugs indicates that the male respondents have much more positive attitudes towards drugs than the females have.

Examining the age variable together with the respondents’ attitudes towards drugs indicates that the young pupils have the most positive attitudes towards drugs, while the older pupils have the least positive attitudes.

The socioeconomic variable result indicates that the upper class respondents have the most positive attitudes towards drugs, then the lower class respondents, while the middle class respondents have the least positive attitudes towards drugs.

The effect of the newspaper coverage of the drugs issue on the Saudi Arabian pupils attitudes has been assessed. That has been accomplished by examining all the respondents’ relationships with the newspapers through the variables of general reading of the newspapers, specific reading about drugs, depth of reading about drugs, belief of the coverage, knowledge about drugs, and the awareness about the coverage of the drugs issue. The scale of attitudes was used to determine the differences between the groups in each variable. The results indicate that only the respondents’ general reading of the newspapers
does not seem to affect their attitudes towards drugs. However, all the other reading variables mentioned above have significant effect on the respondents' attitudes towards drugs. Based on these results we can conclude that the newspaper coverage of the drugs issue has significantly affected the pupils' attitudes and made it more negative towards drugs.

The respondents' involvement with drugs has been examined together with the scale of the attitudes to determine whether those who have some connection with drugs vary in their attitudes from those who do not. The connection with drugs was assessed through four variables: trying drugs, recent use of the drugs, knowing somebody else who has just stopped using drugs and knowing somebody else who has just started using drugs, and each of them had two categories. The results indicate that all these variables significantly influenced the respondents' attitudes towards drugs, and the respondents who answered positively in these variables have much more positive attitudes towards drugs than those who gave negative answers in these variables.
CHAPTER SEVEN

1- (Families encouragement)

2- Connection with other cultures)

3- (Using of drugs)
1. FAMILY ENCOURAGEMENT

The major objective of the survey of the study is to evaluate the impact of the newspaper coverage of the drugs issue on the Saudi Arabian pupils, and to assess the change process including receiving the message, gaining knowledge, awareness of the issues and change in attitudes. In the previous chapter the pupils' exposure to the drugs messages, their interest in them, their knowledge and attitudes have been examined. However, besides these factors, there are three other issues which are not based on the information-processing model and do not assess the change process. They are thought to be important and very relevant to this study. The first of these is the families' encouragement of their children to read about and gain knowledge of drugs, and interest in the coverage by the newspapers.

To study this I looked first at the families' pattern of reading of newspapers in general, second their talking and discussion about drugs with their children and third is their advice to the children to read and gain knowledge about drugs. To determine the encouragement and influence of the families of the children reading about drugs, their reading, talking and advice will be examined together with the pupils' general reading of the newspapers, frequency of reading, reading about drugs, depth of reading about drugs, awareness of the coverage, belief of the coverage materials and the respondents liking of the coverage materials. I hope to show whether these factors increase the pupils' reading about drugs, depth of reading, awareness of the coverage and their knowledge about drugs.
Family patterns of reading newspapers

It was hypothesised that the families who read newspapers regularly had some influence on their children's reading about drugs and about gaining knowledge about drugs. I wanted to investigate the families' patterns of reading newspapers to find out who reads in the families and who does not. To do this, the respondents were asked to indicate who else in the family read newspapers. They were given six choices: father, mother, brother, sister, others and none. In Saudi Arabian families, it is common to find somebody who lives with the family such as an uncle or aunt, that is what the 'other' category in the question refers to. In each questionnaire more than one choice could be selected (see table 66).

<table>
<thead>
<tr>
<th>(Table 66)</th>
<th>Mothers</th>
<th>Fathers</th>
<th>Sisters</th>
<th>Brothers</th>
<th>Others</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16.2%</td>
<td>52.4%</td>
<td>32.0%</td>
<td>60.5%</td>
<td>13.0%</td>
<td>6.2%</td>
</tr>
<tr>
<td></td>
<td>(298)</td>
<td>(961)</td>
<td>(587)</td>
<td>(1110)</td>
<td>(238)</td>
<td>(113)</td>
</tr>
</tbody>
</table>

This table shows that the highest proportion of reading newspapers is among the respondents' brothers, 60.5% (1110). Fathers and sisters show quite a high percentage of reading newspapers. However, reading newspapers among the respondents' mothers is small. The respondents who do not have readers in their families are 6.2% of the whole sample, which means reading in the Saudi Arabian families is quite high. It is clear from the result that young people read the newspapers more than the older, and males more than the females. The relatively small percentage of Saudi Arabian mothers reading newspapers may be because they are less educated than others members in the families.
Talking about drugs within families

It is now intended to investigate whether families talk and discuss drugs with the pupils. To do this the respondents were asked to indicate with whom they talk and discuss the drugs issue. They were given seven choices to select from fathers, mothers, brothers, sisters, friends, teachers and none. The result is presented in table (67).

<table>
<thead>
<tr>
<th></th>
<th>Mothers</th>
<th>Fathers</th>
<th>Sisters</th>
<th>Brothers</th>
<th>Teachers</th>
<th>Friends</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16.5%</td>
<td>24.3%</td>
<td>17.8%</td>
<td>26.8%</td>
<td>8.5%</td>
<td>44.4%</td>
<td>28.0%</td>
</tr>
<tr>
<td></td>
<td>(302)</td>
<td>(446)</td>
<td>(327)</td>
<td>(492)</td>
<td>(155)</td>
<td>(814)</td>
<td>(513)</td>
</tr>
</tbody>
</table>

The table above shows that the highest proportion of talking about drugs is with the pupils' friends, 44.4\% (814), while the lowest one is with their teachers, 8.5\% (155). Brothers and fathers of the pupils show a relatively large percentage of talking to the pupils about drugs. However mothers and sisters show only a small percentage. The pupils who do not talk with anyone about drugs is a relatively large percentage, 28.0\%.

That result shows that families talking about drugs with their children act as an encouragement to them to gain knowledge about drugs. This will be examined together with the pupils' reading in general, reading about drugs, depth of reading about drugs, awareness of drugs and their knowledge about drugs. It will determine whether talking and discussion about drugs have any influence on these variables.
Advice to read about drugs

One of the families' measures of encouragement of the children to read and gain knowledge about drugs is advising them to read about drugs in the newspapers. It was hypothesised that advising the pupils to read about drugs affects their levels of reading about drugs and their awareness and knowledge of drugs. But first the families' advices to the children to read about drugs should be determined. The respondents were asked whether they had been advised to read about drugs or not, and the result is presented in table (68).

<table>
<thead>
<tr>
<th>(Table 68)</th>
<th>Advised</th>
<th>Not advised</th>
</tr>
</thead>
<tbody>
<tr>
<td>31.3% (568)</td>
<td>68.7% (1244)</td>
<td></td>
</tr>
</tbody>
</table>

The table above shows that the pupils who had been advised to read about drugs, 31.3% (568), are much fewer than those who had not been advised.

Once the families' encouragement measures, reading, discussion and talking about drugs and advices to read about drugs have been assessed and revealed, it is time to find out how these factors affect the respondents' reading, their reading about drugs, depth of reading, awareness, recalling, belief and like of the coverage materials.

Influence of the families on the pupils' general reading

It was hypothesised that the families whose members are regular readers of newspapers, who talk and discuss the drugs problem and advise their
children to read about drugs will have some influence on the pupils' reading of newspapers. Once the families encouragement factors had been determined I wanted to examine the influences of each of them on the respondents' reading of the newspapers in general. In other words does the mothers reading for instance increase the respondents reading of the newspapers or not. As mentioned before each of the family members is treated individually as an independent variable. To assess that, all the families members reading of the newspapers, their talking and discussion about drugs with the respondents and their advice to read about drugs have been correlated with the respondents reading of the newspapers. The multiple regression analysis was used to determine which of the family members have more influence on the respondents' reading of the newspapers, and the result is presented in table (69).

<table>
<thead>
<tr>
<th>The dependent variable is the respondents reading of the newspapers</th>
</tr>
</thead>
<tbody>
<tr>
<td>The independent variables</td>
</tr>
<tr>
<td>---------------------------</td>
</tr>
<tr>
<td>Sisters' reading of the newspapers</td>
</tr>
<tr>
<td>Brother reading of the newspapers</td>
</tr>
<tr>
<td>None reading the newspapers</td>
</tr>
<tr>
<td>Talking about drugs with brother</td>
</tr>
<tr>
<td>Talking about drugs with others</td>
</tr>
</tbody>
</table>

Running multiple regression with all family encouragement variables gave the result in the table above. It shows that the only variables correlated with the respondents reading of the newspapers are their sisters and brothers reading of the newspapers. This suggested that the respondents whose sisters and brother read the newspapers tend to read the newspapers more than those
who do not have sister and brother reading the newspapers. Also there is a significant relationship between the none reading variable and the respondents reading in general. This result indicates that the respondents who have no readers in their families seemed to read the newspapers less than those who have readers in the families. With regard to talking and discussion about drugs with the families the result shows that the only family members discussion which have significant relationship with the respondents general reading of the newspapers are talking with brothers and friends. So in summary, reading of the newspapers in general mostly tends to be among those whose sisters and brothers read the newspapers, as well as among those who talk and discuss about drugs with their brothers and friends.

**Influence of families on the pupils frequency of reading**

The families' encouragement of the respondents to read the newspapers more frequently will be determined in this section. It will show whether the families reading, talking and discussion about drugs and their advice to them increased their frequency of reading or not. Variables in this section will be correlated to determine which is the most influential member to have affected the increase of frequency of reading of the newspapers among the respondents. In doing that multiple regression analysis between all variables of the families encouragement factors and frequency of reading will present the result in tables (70).
The table above shows that the only significant relationship is between the respondents' frequency of reading and their fathers and brothers reading of the newspapers. With regard to talking and discussion there is significant relationship between the respondents' frequency of reading and their talking about drugs with their brothers. The result indicates that the respondents' brothers reading and talking about drugs seems to be the most influential encouragement to read about drugs. Also their fathers reading seems to have some influence on their frequency of reading of the newspapers.

Influence of families on the pupils' specific reading about drugs

At the beginning of this section pattern of reading, talking about drugs and advice by the respondents' families' members have been determined. Also their influences on the respondents' reading in general have been revealed. In this section I will examine how the families encouragement factors influence the respondents' specific reading about drugs in the newspapers. Correlational techniques will be used to show which family members have most correlation with the respondents' reading about drugs specifically. In doing that multiple regression analysis will present the result in table (71).
The table above shows that there is significant relationship between sisters and brothers reading of the newspapers and the respondents specific reading about drugs. So the respondents whose sisters and brothers read the newspapers read specifically about drugs in the newspapers more than those who do not have sisters and brothers reading the newspapers. The none reading variable also has significant relationship with the respondents reading about drugs, which means the respondents who do not have any family members reading the newspapers tend to read less about drugs. Talking and discussion about drugs with brothers and friends have a significant relationship with the respondents' reading about drugs, which means they encourage the respondents to read specifically about drugs. There are interesting similarities between the respondents' general reading and their specific reading about drugs with regard to their families reading of the newspapers. In both results sisters and brothers have influenced the respondents to read generally and specifically about drugs. Also their talking with their brothers and friends has influenced the level of reading either in general or specifically about drugs.
Influence of families on the pupils depth of reading

The respondents reading in general and reading about drugs specifically have been previously examined with regard to their families influences. Now I will examine whether the respondents families have affected their children to read deeply about drugs or not by their reading, talking and discussion about drugs and their advice to read about drugs. Families reading, their discussion about drugs and their advice have been correlated with the respondents' depth of reading about drugs to determine which family members reading and talking about and even advice have encouraged the respondents to read more deeply about drugs in the newspapers. In order to do that multiple regression analysis has been used and the result is presented in table (72).

<table>
<thead>
<tr>
<th>The dependent variable is the pupils' depth of reading about drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>The independent variables</td>
</tr>
<tr>
<td>Families advice to read about drugs</td>
</tr>
<tr>
<td>Talking about drugs with friends</td>
</tr>
</tbody>
</table>

The table above demonstrates the result of multiple regression with all family members reading, talking and advice to the respondents to read about drugs. The result shows that the only members of the families who have significant relationship with the respondents' depth of reading about drugs is talking to their friend, (4.100, p<.0000.). Also the families advising their children to read about drugs has a significant relationship with their depth of reading. So the respondents who seemed to read more deeply about drugs are those who have been advised to read about them and those who talk and discuss...
the drugs issue with their friends. It should be mentioned here that none of the family members reading of the newspapers have affected the respondents depth of reading about drugs.

Influence of families on the pupils’ awareness

The families influence on the respondents awareness about the newspapers coverage of the drugs issue will be examined in this section. It will determine whether the family members reading and talking about drugs and advising them to read about drugs have increased the respondents’ awareness about the coverage or not. All variables of the families’ encouragement will be correlated with the respondents’ awareness of the coverage. Multiple regression will show which of these variables significantly increased the respondents awareness of the coverage, and the result is presented in table (73).

<table>
<thead>
<tr>
<th>Table (73)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The dependent variable is the respondents awareness of the coverage</td>
</tr>
<tr>
<td>The independent variables</td>
</tr>
<tr>
<td>Father reading the newspapers</td>
</tr>
<tr>
<td>None reading the newspapers</td>
</tr>
<tr>
<td>Talking about drugs with nobody</td>
</tr>
</tbody>
</table>

The table above shows that the respondents father reading the newspapers has a significant relationship with their awareness of the drugs coverage in the newspapers. It indicates that the respondents whose their fathers read the newspapers were more aware of the drugs coverage than those whose fathers do not read the newspapers. The table also shows that in families who have no readers of the newspapers children seemed to be less aware of the
coverage of the drugs. Talking to nobody has a significant relationship with the respondents' awareness of the drugs coverage. The result indicates that although there is no significant relationship between the family members reading and talking about drugs, the respondents who do not talk about drugs with their families have less awareness of the drugs coverage in the newspapers.

**Influence of families on the pupils recall of the coverage**

The families encouragement of the respondents' recall of the coverage materials will be examined in this section. The families pattern of reading of the newspapers, their talk and discussion about drugs with their children and their advice to them to read about drugs will be correlated with the respondents recall of the coverage materials. The result will determine whether these variables have some effect on the respondents' recall or not. In doing that multiple regression analysis has been used and the result will be presented in table (74).

<table>
<thead>
<tr>
<th>The dependent variable is the pupils recalling of the coverage materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>The independent variables</td>
</tr>
<tr>
<td>Fathers reading the newspapers</td>
</tr>
<tr>
<td>Brothers reading the newspapers</td>
</tr>
<tr>
<td>Others reading the newspapers</td>
</tr>
<tr>
<td>Talking about drugs with brothers</td>
</tr>
<tr>
<td>Talking about drugs with friends</td>
</tr>
<tr>
<td>Families advice to read about drugs</td>
</tr>
</tbody>
</table>

The result in the table above shows that the only family members whose
reading pattern have a significant relationship with the respondents recall of the coverage materials are their fathers and brothers. The other family members reading do not have a significant relationship, which means they do not influence the respondents recall of the coverage materials. There are also significant relationships between talking about drugs with both brothers and friends and the respondents' recall of the drugs coverage materials. The families advice to the respondents to read about drugs in the newspapers also show a significant relationship with their recall. The result indicates that the respondents brothers seemed to be the closest to them in this respect as we can see their reading and talking have increased the respondents recall about drugs. As mentioned before some families have uncles, aunts and/or grand parents within the "others" category in this section. Their reading of the newspapers has a significant relationship with the respondents' recall of the coverage materials, which means they have some influence to increase the respondents recall. As is shown in some previous tables in this section, talking to friends has a significant relationship with the respondents’ recall, which indicates that their friends seem to be the closest people to whom they talked about drugs.

Influences of families on the pupils’ belief of the coverage

The respondents belief of the coverage materials has been examined together with their families’ encouragement to read and gain knowledge about drugs. The families members reading of the newspapers, their talking and discussion about drugs and their advice have been correlated with the respondents’ belief of the coverage materials. The data have been treated by multiple regression analysis to determine whether these variables have increased
believing the coverage about drugs among the respondents or not. The result is presented in table (75).

<table>
<thead>
<tr>
<th>The dependent variable is the pupils belief of the coverage materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>The independent variables</td>
</tr>
<tr>
<td>None reading the newspapers</td>
</tr>
<tr>
<td>Talking about drugs to teachers</td>
</tr>
<tr>
<td>Talking about drugs to friends</td>
</tr>
<tr>
<td>Talking about drugs to nobody</td>
</tr>
</tbody>
</table>

The result of the multiple regression analysis in the table above does not show any relationship between the family members reading newspapers and the respondents belief of the coverage materials. However, the "none reading" category has a significant relationship with the respondents’ belief of the coverage. It indicates that the respondents who have nobody in the family who reads newspapers believed the coverage less than those who have. So because all the members can be included in this category, it can be said that the respondents families reading of the newspapers have increased their belief of the coverage which materials. With regard to discussion and talk about drugs there are three categories have significant relationship with the respondents’ belief of the drugs coverage materials. Their talking with their teachers has a significant relationship with their belief. That means talking about drugs with teachers increase the chance of believing the coverage. That probably, in my view, is because the credibility of teachers among the respondents seemed to be higher than others. At the same time talking to nobody in the families has a significant relationship with the respondents belief of the coverage. So,
because that included all the family members, it can be said that the respondents who did not talk and discuss about drugs have less belief. The respondents talking about drugs with their friends has a significant relationship with their belief. The respondents who talked to their friends tend to believe the coverage materials more than others. This result indicates that respondents talking about drugs with their friends increased the chance of believing about drugs.

**Influence of families on the pupils liking of the coverage**

In this section the respondents liking of the newspaper coverage of the drug issue will be examined together with their families encouragement to determine whether they have influence on that or not. Multiple regression analysis has been used between the family encouragement variables and the respondents liking of the coverage, and the result is presented in table (76).

<table>
<thead>
<tr>
<th>Table (76)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The dependent variable is the pupils like of the coverage materials</strong></td>
</tr>
<tr>
<td><strong>The independent variables</strong></td>
</tr>
<tr>
<td>Sister reading of the newspapers</td>
</tr>
<tr>
<td>Talking about drugs with nobody</td>
</tr>
<tr>
<td>Families advice to read about drugs</td>
</tr>
</tbody>
</table>

The only family member whose reading has a significant relationship with the respondents liking of the coverage is their sisters reading of the newspapers. It indicates that the respondents whose sisters read the newspapers tend to like the coverage more that those whose sisters do not read the newspapers. The "talking to nobody" category in the families' encouragement
has a significant relationship with the respondents liking of the coverage. That means talking to nobody has a negative effect on the respondents’ liking of the coverage materials, which indicates that those who do not talk to anyone tend to like the coverage less than those who talk about drugs. The families’ advice to their children also has a significant relationship with the respondents’ liking of the coverage materials. The result indicates that the respondents who have been advised like the coverage materials more than those who have not been advised to read and gain knowledge about drugs.

SUMMARY AND CONCLUSION

Besides the assessment of the impact of the newspaper coverage of the drug issue on the pupils’ knowledge and attitudes towards drugs, there are other factors which are believed to be important in this task. They are not based on the theoretical concept of this study, but they are thought to be relevant.

The objective in this section has been to assess the Saudi Arabian families’ encouragement of the pupils to read and gain knowledge about drugs in order to avoid involvement and in order to develop negative attitudes toward them. It was hypothesized that families who encourage their children to be knowledgeable about drugs will have some influence on their knowledge and attitudes.

To assess the families’ encouragement, three aspects were examined. The families’ reading of the newspapers, their level of talking and discussion with the pupils about drugs and their advice to the pupils to read about drugs. Each of these was examined together with the pupils’ general reading,
Frequency of reading, specific reading about drugs, depth of reading about drugs, awareness of the newspapers coverage, recalling of the coverage materials, belief and liking of the coverage materials.

Assessing the families' reading of the newspapers indicates that the highest level of reading in the families is among the pupils' brothers, 60.5% (1110), while the lowest level is among their mothers, 16.2% (298). In general the males in the families read more than the females and young people more than the old.

That can be attributed, in my opinion, to the education system in the country. Saudi Arabia has a relatively short history of education for the whole of its population. Education was started may be no more than 40 years ago. As a result of that the country still has quite a high rate of illiteracy especially among the old people. That makes the rate of reading newspapers among the older people much less than among the younger. Additionally, the education system for girls started later than for boys. When it started it was faced with large scale argument in the society and many families did not allow their girls to go to school. In fact many families still do not allow their female children to continue their education beyond primary level. So, in my view, that has the effect of decreasing the level of reading newspapers among Saudi Arabian women.

Examining the families reading, together with the pupils reading, indicated that the most influence on the pupils came from their sisters and brothers reading habits. Also the effect is clear that those who do not have readers in their families do much less reading than those who have. The only members who do not affect the pupils' reading are the mothers. So it can be
concluded that families’ reading, does have influence and increases the pupils’ general reading.

This result means, in my opinion, that the Saudi Arabian families have quite a strong influence upon their children. Indeed basic knowledge or experience of the society will support that. In modern societies such as Britain, for instance, it is hard to find children living with their parents after their marriage in the same house. It is very unlikely to find two brothers living in one house with their wives and children. In contrast, it is very common to find that in Saudi Arabian society. This point, in my opinion, indicates how the older generation have control over the younger generation. Having understood that it become clear why the pupils who have readers in their families read the newspapers more than those who do not. That might also be explained by the availability of the newspapers among the pupils who have readers in their families. For example the pupils who have parents or any family members reading the newspapers have access to them more than those who do not. That could also increase the reading among the pupils whose families read the newspapers, in my view.

To determine the effect of the families reading on the pupils’ specific reading about drugs they were examined with each other. The respondents who have readers in their family tend to read about drugs more. However the result of multiple regression indicates that the most influential members on the pupils reading about drugs are their sisters and brothers. Also it significantly shows that the pupils who do not have any member in his family to read the newspapers definitely read less about drugs. Thus the conclusion can be drawn that families’ reading habits do affect and increase the pupils’ reading about
drugs.

The influence of the families reading on the pupils' depth of reading about drugs seems to be marginal. The pupils who have readers in their families show a similar depth of reading about drugs to those who do not have readers. Thus, the families' reading does not have any effect and does not increase the pupils depth of reading about drugs.

The effect of the families reading on the pupils' awareness of the coverage of the drug issue was examined by multiple regression analysis between the two variables of families' reading and the pupils' awareness. The only family members reading have to affected the pupils' awareness of the drug coverage were the fathers. However, the differences between those who did not have any family members who read newspapers and those who had is significantly clear with regard to their awareness. So, the conclusion is drawn that the effect of the families' reading on the pupils' awareness can be said to be increased among the pupils who have readers in their families.

The effect of the families' reading on the pupils' knowledge about drugs does not seem to be strong, although, brothers' reading significantly influenced and increased the pupils knowledge of the drug coverage. However, it can be said the families' reading does generally encourage the pupils to know about drugs.

Assessing the families talking about drugs with the pupils indicated that the highest proportion of talking is with friends, brothers, then fathers. Those who do not talk and discuss drugs are only 28.0% of the respondents.

In my view, this result means that the pupils at that age have open minds and closer relationships with their friends and brothers who are closer to them.
in age. It might also be caused by difficulties with their parents in talking and
discussing sensitive matters like drugs. It also might means that there are big
gaps between the older people and the young people in the way of thinking and
tackling their problems as a result of background and education differences.
among the old people, talking about their problems even to their friends in
Saudi Arabian is regarded as a weakness. But such a thing might not be found
among the younger generations.

Talking about drugs within families has affected the pupils’ general
reading and also their specific reading about drugs. The depth of reading about
drugs has been increased among the pupils and that indicates that the pupils are
couraged to read by talking to them about drugs. Talking about drugs with
some members of the families and their friends increases the pupils’ awareness
of the drug coverage. It can be concluded that encouraging the pupils to be
aware of drug issues is best done by talking to them about drugs.

That supports the view I mentioned before which says that the Saudi
Arabians have strong influence over their children. It also means that discussion
is not always bad, even of sensitive matters, such as many people claimed with
regard to the Saudi Arabian newspaper coverage of the drugs issue.

The last measure of encouragement of the pupils is directly advising
them to read about drugs. This result indicates relatively few pupils have been
advised. Advising the pupils does not affect their general reading, but it
increases their specific reading about drugs, their depth of reading and their
recall of the coverage. The pupils’ knowledge does not seem to be affected by
advice to read about drugs.
2. CONNECTION WITH OTHER CULTURES

The second section in this chapter which is not based on the information-processing model, and the change process is the pupils connection with other cultures and the impact of that on their knowledge, attitudes and use of drugs. In other words this section will assess whether being abroad and having contact with the world outside Saudi Arabia has any influence and effect on the pupils’ knowledge and attitude to drugs and their use. It was hypothesised that pupils who have been abroad will differ in this respect from those who have never been abroad. They might have more knowledge of drugs, and also a more positive attitude towards them. This means the likelihood of using drugs among those who have been abroad is thought to be more than those who have not.

To assess that aspect the respondents were asked whether they have been abroad or not, and if so in which country. When the data was collected it was categorised into four categories: Arabic countries, western countries, eastern countries and a category which is sufficiently broad to be called 'all over the world'.

**Being abroad**

The respondents were asked a yes or no question whether they have been abroad or not. The frequency result is presented in table (77):

<table>
<thead>
<tr>
<th>Have been abroad</th>
<th>Have not been abroad</th>
</tr>
</thead>
<tbody>
<tr>
<td>56.9% (1037)</td>
<td>43.1% (785)</td>
</tr>
</tbody>
</table>

This table shows that the majority of the pupils have been abroad, 56.9%
This result gives a broad picture of the travelling pattern among Saudi Arabian pupils.

**Being abroad and knowledge about drugs**

In this section, the impact of travelling and connection with other cultures, in general and without specification of any country, on the pupils' knowledge of drugs will be examined. It will seek to discover whether being abroad increases knowledge about drugs or not. Cross-tabulations between being abroad and the pupils' knowledge of drugs is presented in table (78):

<table>
<thead>
<tr>
<th></th>
<th>Have been abroad</th>
<th>Have not been broad</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know about drugs</td>
<td>98.8% (1023)</td>
<td>98.3% (767)</td>
<td>98.6% (1790)</td>
</tr>
<tr>
<td>Do not know</td>
<td>1.2% (12)</td>
<td>1.7% (13)</td>
<td>1.4% (25)</td>
</tr>
<tr>
<td>Total</td>
<td>57.0% (1035)</td>
<td>43.0% (780)</td>
<td>1815</td>
</tr>
</tbody>
</table>

\((x^2)= 0.84, \ df=1, \ P < .358.\)

This table does not show any significant difference between pupils being abroad and their knowledge of drugs, \((x^2)=0.84, \ df=1, \ P < .358.\). The pupils who have been abroad and those who have never been abroad have similar levels of knowledge about drugs, and the hypothesis, which says being abroad has some effect on their knowledge is therefore rejected.

**Being abroad and attitudes towards drugs**

In this section the influence of travelling outside the country on the pupils' attitudes toward drugs will be examined. It will determine whether the
pupils who have been abroad have similar attitudes to those who have not. It was hypothesised that being abroad might introduce more positive attitudes towards drugs. The differences between the two groups will be examined by a t-test.

The result of the t-test demonstrates no significant differences between the traveller pupils and the non travellers in their attitudes to drugs, (mean = 31.11 v. 1037, std = 8.704 vs 9.22), t(1819) = 0.60, p < .550.

The result of the t-test does not demonstrate a significant difference between travelling and the pupils attitudes towards drugs. This indicates as the hypothesis expected that being abroad does not influence the pupils attitudes to drugs and does not make them more positive.

**Being abroad and use of drugs**

One aim of this part is to assess the usage of drugs among the pupils, which is discussed later in section 2.6. The likelihood of using drugs among the travellers is expected to be higher than among the non travellers. This section will examine that hypothesis and will hope to reveal whether pupils who have been abroad have used drugs more than those who have not. Cross-tabulation between the pupils travelling and their use of drugs is presented in table (79):

<table>
<thead>
<tr>
<th></th>
<th>Have been abroad</th>
<th>Have not been broad</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used drugs</td>
<td>1.5% (16)</td>
<td>1.4% (11)</td>
<td>1.5% (27)</td>
</tr>
<tr>
<td>Do not use drug</td>
<td>98.5% (1017)</td>
<td>98.6% (765)</td>
<td>98.5% (1782)</td>
</tr>
<tr>
<td>Total</td>
<td>57.1% (1033)</td>
<td>42.9% (776)</td>
<td>1809</td>
</tr>
</tbody>
</table>

\[(x^2) = 0.05, \text{ df}=1, \text{ P < .819}\]
This table does not show a significant difference between pupils travelling outside the country and their use of drugs, \((x^2)=0.05\), df=1, \(p<.01\). The use of drugs is similar among the travellers and non travellers alike and the hypothesis is therefore rejected.

For more convincing evidence of the likelihood of influencing the respondents by their connection with other cultures, deeper statistical measures have been used. Being abroad has been correlated with the respondents' knowledge, attitudes and their use of drugs to determine the mentioned hypothesis. The data have been treated by multiple regression between the variables. However, the result did not show any sign or significant relationship between the respondents travelling and their knowledge and attitudes toward drugs.

So, it is clear from the simple analysis, cross-tabulation, and from deeper analysis and multiple regression, that the result did not indicate any increase among the respondents who travelled outside the country. Thus based on these results, the hypothesis which says being abroad could increase knowledge, attitudes and use of drugs is rejected.

**Countries**

It is well known that getting drugs in some countries is much easier than some others. This section, will examine differences between pupils according to the countries they travelled to, and whether for instance, travellers to Western countries differ from those who travelled in the Arabic countries. They were asked to indicate the country they travelled to. After collecting the data
all the answers were categorized into four groups of those who had been in: the Arab World, the Western World, the Eastern World, and elsewhere. Some of the respondents had travelled to more than one of these categories such as those who had been to Egypt, United Kingdom and Japan. These answers were given the category of ‘all’. The result is stated in table (80).

<table>
<thead>
<tr>
<th>Arabic Countries</th>
<th>Western Countries</th>
<th>Eastern Countries</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>64.0% (642)</td>
<td>13.6% (136)</td>
<td>1.5% (15)</td>
<td>20.9% (210)</td>
</tr>
</tbody>
</table>

The majority of the pupils who had travelled had been in Arab Countries, 64.0% (642), 13.6% (136) had been to the Western World and only 1.5% (15) had been to the Eastern countries. There were 20.9% (210) who had travelled all over the world.

**Countries and knowledge about drugs**

This section will clarify the influence of the kind of the country on the pupils’ knowledge. Cross-tabulation between the kind of country and the pupils’ knowledge about drugs is presented in table (81).

<table>
<thead>
<tr>
<th>(Table 81)</th>
<th>Arabic countries</th>
<th>Western countries</th>
<th>Eastern countries</th>
<th>All countries</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know about drug</td>
<td>98.9% (634)</td>
<td>100.0% (136)</td>
<td>100.0% (15)</td>
<td>99.0% (208)</td>
<td>99.1% (993)</td>
</tr>
<tr>
<td>Don’t know about drug</td>
<td>1.1% (7)</td>
<td>0.0% (1)</td>
<td>0.0% (1)</td>
<td>1.0% (2)</td>
<td>0.9% (9)</td>
</tr>
<tr>
<td>Total</td>
<td>64.0% (641)</td>
<td>13.6% (136)</td>
<td>1.5% (15)</td>
<td>21.0% (210)</td>
<td>1002</td>
</tr>
</tbody>
</table>

\[(x^2) = 1.64, \ df = 3, P < .648.\]
The table above does not show a significant difference between pupils' knowledge about drugs and the kind of the country they travelled to, 

\( \chi^2 = 1.64, \text{df} = 3, p < .648 \). For example, there is a similar percentage of knowledge about drugs among travellers to the West and travellers to the East. This indicates that travelling to different countries does not seem to have any impact on the pupils' knowledge of drugs.

### Countries and use of drugs

The influence of being in different countries on the pupils use of drugs will be examined in this section. It will hope to discover differences between those who have travelled in the Arab Countries, and those who have been in the Western Countries with regard to drug use. Cross-tabulation between the kinds of country and the use of drugs is presented in table (82):

| (Table 82) |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| Arabic countries | Western countries | Eastern countries | All countries | Total |
| Used drug        | 1.9% (12)        | 3.7% (5)         | 0.0% (1)       | 1.4% (3)        | 2.0% (20) |
| Do not use drug  | 98.1% (627)      | 96.3% (131)      | 100.0% (15)    | 98.6% (206)     | 98.0% (979) |
| Total            | 64.0% (639)      | 13.6% (136)      | 1.5% (15)      | 20.9% (209)     | 999       |

\( \chi^2 = 2.64, \text{df} = 3, p < .450 \).

The table above shows no significant difference between the kind of the country the pupils travelled to and their use of drugs, \( \chi^2 = 2.64, \text{df} = 3, p < .450 \). There are only small differences between the pupils use of drugs regardless of the country they have been to, and the hypothesis is rejected.
SUMMARY AND CONCLUSION

One of the relevant aspects, which is thought to be important in this task, is the pupils' connection with other cultures, and the influence of that on their knowledge, attitudes and use of drugs. It was hypothesised that travelling outside the country could increase the knowledge about drugs, but at the same time it might introduce more positive attitudes towards drugs. Also the likelihood of using drugs is thought to be more among the travellers than the non travellers.

A majority of the pupils had been abroad, 56.9%, (1037) while 43.1% (785) had not. The first hypothesis in this section, expected an increase in the traveller pupils' knowledge over the non travellers, but the hypothesis was not supported. The travellers' knowledge of drugs was similar to the non travellers knowledge. The second hypothesis in this section was that the attitudes of the traveller pupils might be more positive towards drugs than the non traveller pupils' attitudes. The result of the statistical t-test indicates no significant differences between the two groups, and the hypothesis was not supported. As the third hypothesis the use of drugs was expected to be higher among the traveller pupils than the non travellers. The result of examination of that hypothesis indicates a slight increase among the travellers, but statistically was not significant. The impact of travelling on the pupils use of drugs was very little. So that hypothesis was also rejected.

According to these results we can conclude that the Saudi Arabian pupils connection with other cultures and travelling to the other countries does not affect their knowledge, attitudes or use of drugs.

After assessment of the pupils travelling patterns in general and the
influences on their knowledge and their use of drugs, it might be thought that the travellers to the East might vary from the travellers to the West or the Arab world in their knowledge and use of drugs. This was assessed.

Most of the traveller pupils had been in the Arab Countries, 64.0% (642), while 13.6% (136) of them had been to the West. Only 1.5% (15) had been to Eastern countries and 20.9% (210) had travelled all over the World.

Differences between the pupils knowledge according to the countries they had visited was small and insignificant. Travellers to the West or to Arab Countries had similar levels of knowledge about drugs compared with those who travelled to the East. The pupils use of drugs was also examined according to the countries they had been to. The result indicates no significant differences between the travellers to different countries with regard to their use of drugs.

So, based on these results we can reject the hypothesis, which says travelling to different countries might have some influence on pupils’ knowledge and their use of drugs. The tentative conclusion can be drawn that being in any place or country, West, East or in the Arab world does not have any influence on the Saudi Arabian pupils’ knowledge or their use of drugs.

The result of this section means that, although the Saudi Arabian pupils have quite a high rate of travelling outside the country, they do not seem to have integrated with other societies. In Saudi Arabia travelling abroad is not allowed to people who are under 18 years old without one or both their parents present. This could be the explanation for their non-involvement with others because of the supervision of their parents. Also the result might be attributed to the character of the pupils and the culture in which they grow up. It might be attributed to the differing culture of the countries they travelled to, i.e. the
attitudes towards drugs in those societies.

The high level of travel within the Arab World as opposed to travel to non Arab countries might be due to economic reasons. Travelling to a neighbouring Arab country costs much less money than to the West for instance. It also might be something to do with their language and culture since they would find it easier to communicate in the Arab countries than anywhere else.
3. USING DRUGS

Dissemination of information about drugs in the mass media and its availability for every individual, including children and teenagers, has been opposed by many academic and religious leaders in Saudi Arabia. They believe that although there are some advantages in teaching people about drugs, there are also disadvantages. In their view the mass media provides an easy way of introducing many vulnerable youngsters to drugs, and encourages them to try them.

These negative arguments have been affirmed by many research studies. Other studies, however, show that diffusion of information about drugs has great benefits.

This section, will assess the Saudi Arabian pupils use of drugs, to discover the effect of the newspapers coverage on that. It will hope to also give a full picture of drug use among the pupils and their relatives and friends before and after media coverage.

To assess the pupils' pattern of using drugs four aspects will be assessed:

1. Whether the pupils have ever tried drugs in their life,
2. Whether they are using drugs, or recognize themselves as drug users.
3. Whether they know any ex-users who have recently quit using drugs.
4. Whether they know anyone who has started using drugs recently.

Because of the sensitivity of the issue, and the nature of the society's religion and its traditions, it was felt that asking respondents questions about somebody else's use of drugs would give them more freedom to answer honestly.

All these aspects will be examined together and linked to other variables
such as geographical region, gender, age and socioeconomic class.

**Trying drugs**

This section will examine whether the respondents have ever used drugs, i.e. assess lifetime prevalence. The data here gives a view of the use of drugs among the pupils before any newspaper coverage of drugs. To do that the respondents were asked whether they had ever tried drugs in their life or not, and the result is presented in table (83):

<table>
<thead>
<tr>
<th>Tried drugs</th>
<th>Have not tried drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1% (57)</td>
<td>96.9% (1769)</td>
</tr>
</tbody>
</table>

The table above shows that the number of pupils who have tried drugs is only 3.1% (57) of the whole sample, while the majority of the respondents, 96.9% (1769), have never tried using drugs.

Before measuring the influence of the newspapers coverage of the drugs issue on the respondents trying the drugs it is worth presenting some descriptive analysis. It will show the differences between the respondents according to their geographical regions, gender, age and social classes. So, in the next four sections the differences between trying drugs according to these factors will be examined.

**Trying drugs in the regions**

The first of the descriptive studies is to show which region in Saudi Arabia have prevalent use of drugs. This section will examine the differences between the respondents in each region and those in other regions with regard
to trying drugs. Cross-tabulations between the respondents trying drugs and the geographical region in which they live is presented in table (84):

<table>
<thead>
<tr>
<th></th>
<th>Riyadh region</th>
<th>Jeddah region</th>
<th>Dammam region</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have tried drugs</td>
<td>1.5% (11)</td>
<td>5.9% (23)</td>
<td>3.3% (23)</td>
<td>3.1% (57)</td>
</tr>
<tr>
<td>Have not tried drugs</td>
<td>98.5% (725)</td>
<td>94.1% (370)</td>
<td>96.7% (674)</td>
<td>96.9% (1769)</td>
</tr>
<tr>
<td>Total</td>
<td>40.3% (736)</td>
<td>21.5% (393)</td>
<td>38.2% (697)</td>
<td>1826</td>
</tr>
</tbody>
</table>

\[ (x^2) = 16.20, \text{ } P < .000. \]

This table shows a significant difference between respondents trying drugs and living in a certain region, \((x^2) = .20, \text{ } df = 2, \text{ } P < .0001, \) i.e. this means large differences between the pupils in each region. The respondents from the Jeddah Region 5.9% seem to try drugs more than their counterparts in the other regions. The lowest percentage of trying drugs, 1.5%, was among the respondents from the Riyadh Region. This is slightly surprising since Riyadh is the capital city and in many parts of the world capital cities are areas of high drug use.

**Trying the drugs by males and females**

Although this table is not intended to show the influence of the gender variable on the respondents trying of drugs, it is worth mentioning that the gender variable has an effect on increasing drug usage among the pupils. That point will be explained at the end of this section. But now it is only to describe the differences between the male and the females with regard to their trying of drugs. The differences between the two groups can be revealed by cross-tabulated analysis, and the result is presented in table (85).
(Table 85)

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have tried drugs</td>
<td>4.8% (50)</td>
<td>0.9% (7)</td>
<td>3.1% (57)</td>
</tr>
<tr>
<td>Have not tried drugs</td>
<td>95.2% (993)</td>
<td>99.1% (776)</td>
<td>96.9% (1769)</td>
</tr>
<tr>
<td>Total</td>
<td>57.1% (1043)</td>
<td>42.9% (783)</td>
<td>1826</td>
</tr>
</tbody>
</table>

\( (x^2) = 22.49, \ df = 1, \ P < .000. \)

The difference between the pupils trying drugs and their gender is significant, \( (x^2) = 22.49, \ df = 1, \ P < .0001. \) That demonstrates big differences between males and females trying drugs. There are many more male respondents who have tried drugs, 4.8% (50), than females, 0.9% (7).

**Trying drugs in the age groups**

This section will determine which age group has tried drugs more than the others. Cross-tabulation between the two variables is presented in table (86).

(\textbf{Table 86})

<table>
<thead>
<tr>
<th>Age grp one</th>
<th>Age grp two</th>
<th>Age grp three</th>
<th>Age grp four</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have tried drugs</td>
<td>1.6% (6)</td>
<td>3.2% (28)</td>
<td>3.6% (19)</td>
<td>8.2% (4)</td>
</tr>
<tr>
<td>Have not tried drugs</td>
<td>98.4% (368)</td>
<td>96.8% (836)</td>
<td>96.4% (509)</td>
<td>91.8% (45)</td>
</tr>
<tr>
<td>Total</td>
<td>20.6% (374)</td>
<td>47.6% (864)</td>
<td>29.1% (528)</td>
<td>2.7% (49)</td>
</tr>
</tbody>
</table>

\( (x^2) = 7.35, \ df = 3, \ P < .061. \)

The table above shows that the highest percentage of pupils trying drugs is in age group four; they have 8.2% while the lowest percentage is in age
group one, 1.6%. The differences between the two groups seems to be large. However the statistical test (chi-square) does not indicate a significant difference between the age variable and respondents trying drugs \( (x^2) = 7.35 \), df=3, \( p < .061 \). That result indicates that age is not of great influence.

**Trying drugs across the social classes**

Differences between the social classes of respondents trying drugs will be examined in this section. The aim is to see if there are differences in the social classes of pupils who have tried drugs. Cross-tabulations between the socioeconomic class and the respondents trying drugs is presented in table (87).

<table>
<thead>
<tr>
<th>(Table 87)</th>
<th>Upper class</th>
<th>Middle class</th>
<th>Lower class</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have tried drugs</td>
<td>4.0% (17)</td>
<td>2.5% (20)</td>
<td>3.3% (20)</td>
<td>3.1% (57)</td>
</tr>
<tr>
<td>Have not tried drugs</td>
<td>96.0% (409)</td>
<td>97.5% (581)</td>
<td>96.7% (581)</td>
<td>96.9% (1764)</td>
</tr>
<tr>
<td>Total</td>
<td>23.4% (426)</td>
<td>43.6% (794)</td>
<td>33.0% (601)</td>
<td>1821</td>
</tr>
</tbody>
</table>

\( (x^2) = 2.09, \ P < .350. \)

This table does not show a significant difference between the socioeconomic variable and the respondents trying drugs, \( (x^2) = 2.09, \ df=2, \ p < .350. \) which means that socioeconomic class has little influence on trying drugs. However, the result in the table above indicates that the upper class respondents have the highest proportion of trying drugs. It also indicate that the
middle class respondents have the lowest percentage of trying drugs among all classes.

Once the respondents pattern of trying drugs and the variation between them have been revealed, it is time to determine whether the newspaper coverage has increased the respondents trying of drugs or not.

**Influence of the newspaper coverage on trying of drugs**

As mentioned previously at the beginning of this section, dissemination and availability of information about drugs among young people could have a negative effect. In the view of some groups the newspapers can be an easy way of introducing teenagers to the drug world by their coverage. This section will examine this hypothesis and will determine whether reading about drugs and general involvement with the newspaper coverage has increased drug use among teenagers or not. That can be done by a correlational technique between the coverage factors and the respondents trying of drugs. In doing that the data have been treated by multiple regression analysis to determine which variable is the most effective on the respondents use of drugs, and the result is presented in table (88).

| Table (88) |
|-------------------|------------------|
| The dependent variable is the respondents trying of drugs | |
| The independent variables | Significance |
| Gender | .0100 |

The table above shows that the only variable to have a significant relationship with the respondents trying of drugs is gender. All the newspaper
coverage variables, including general reading, reading about drugs, depth of reading about drugs, awareness, recall, belief and liking of the coverage materials have been correlated with the respondents trying of drugs. However the result of multiple regression does not show any significant relationship between these variables and the respondents trying of drugs. So the respondents who read the newspapers and are involved with the coverage in general do not show an increase in their trying of drugs. So based on that result it can be concluded that the respondents did not try drugs as a consequence of the drugs coverage. Thus the hypothesis which says that the coverage can be an easy way of teaching the young people to use drugs is rejected.

Current use of drugs

This section will examine the current use of drugs among pupils. Because the previous section gives a broad picture of those who have ever tried drugs in their life, this section will shed some light on whether they still use drugs, have increased their use or have stopped using them. It also will examine the idea, which some people have, that drug use has increased, particularly among the youngest people, as a consequence of publishing materials about drugs in the newspapers and other media. The respondents were asked whether they are using drugs now or whether they recognize themselves as drug users. The result is presented in table (89).

<table>
<thead>
<tr>
<th>Drug users</th>
<th>Non drug users</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.7% (31)</td>
<td>98.3% (1790)</td>
</tr>
</tbody>
</table>

This table shows that only 1.7% (13) of the whole sample said they were
still using drugs and think they are drug users, while the majority of the
respondents said they had not used them. Comparison between those who have
tried drugs, 3.1% (57) in the previous section, and those who were still using
them, 1.7% (31) in this section, demonstrates an apparently big decline in the
use of drugs. This result rejects the hypothesis of an increased level of drug use
as a result of the newspaper coverage of the drugs issue.

The next table shows and examines the differences between those who
have tried drugs but are no longer using them, which means they have stopped,
and those who are currently using them from those who have never tried drugs
before. The result is presented in table (90).

<table>
<thead>
<tr>
<th>Have tried drugs</th>
<th>Have not tried</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are using drugs</td>
<td>52.7% (29)</td>
<td>0.1% (2)</td>
</tr>
<tr>
<td>Are not using</td>
<td>47.3% (26)</td>
<td>99.9% (1757)</td>
</tr>
<tr>
<td>drugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3.0% (55)</td>
<td>97.0% (1759)</td>
</tr>
</tbody>
</table>

\[(x^2) = 878.9, \ df = 1, \ p < .0001.\]

The table above shows highly significant differences between the
respondents trying drugs and their current using of them, \((x^2) = 878.9, \ df = 1, \ p < .0001.\) Comparison between the respondents who have tried drugs and still
use them and those who are using them but have now stopped demonstrates that
47.3% (26) of those who tried drugs before are no longer using them. On the
other hand the respondents who can be seen as new users compared to those
who have never tried drugs is only 0.1% (2). They can be regarded as newly
involved with drugs because they have not tried drugs before but are using
them now. However 99.9% (1757) of those who have never tried drugs are still not involved with drugs.

This result indicates that dissemination of information about drugs, even to the youngest, does not seem to increase their use of drugs and reduction in the use of drugs among those who tried them previously is much more than new involvement in drug use.

For more convincing and deeper statistics in showing the effect of the newspaper coverage on the respondents' current use of drugs a correlational technique will be used. All the variables of the newspaper coverage will be correlated with the respondents current use of drugs to show whether they increased it or not. In doing that multiple regression will be used to determine which is the most influential variable on the respondents current use of drugs, and the result is presented in table (91).

| Table (91) |
|-----------------|----------------|
| The dependent variable is the respondents’ current use of drugs | |
| The independent variables | Significance |
| Gender | .0237 |

The table above shows the result of the multiple regression analysis of the respondents use of drugs with all variables of the newspapers coverage of the drugs issue. The only significant relationship is with gender variable. The differences between the male and the female respondents is revealed by cross-tabulation analysis. The result significantly indicates that the male respondents use drugs more than the females, (see table 92). The result do not show any significant relationship between the respondents current use of drugs and the
newspaper coverage variables, such as reading, reading about drugs, depth of reading, awareness about the coverage, belief and liking of the coverage. So, it is clear that involvement with the newspaper coverage of the drug issue did not increase the respondents current use of drugs. Thus the hypothesis mentioned earlier that the coverage could increase drug use among young people is rejected.

For more information it is thought to be useful to show some of the differences between the respondents current use of drugs with regard to their geographical region, gender, age and socioeconomic class.

Current use of drugs in the regions

This section will examine the differences between the pupils use of drugs by respondents living in certain regions, and whether there is a similar level of drug use or not. Cross-tabulation between the regions and the respondents use of drug is shown in table (92).

<table>
<thead>
<tr>
<th></th>
<th>Riyadh Region</th>
<th>Jeddah Region</th>
<th>Dammam Region</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug users</td>
<td>1.4% (10)</td>
<td>2.0% (8)</td>
<td>1.9% (13)</td>
<td>1.7% (31)</td>
</tr>
<tr>
<td>Non users</td>
<td>98.6% (724)</td>
<td>98.0% (386)</td>
<td>98.1% (680)</td>
<td>98.3% (1790)</td>
</tr>
<tr>
<td>Total</td>
<td>40.3% (734)</td>
<td>21.6% (394)</td>
<td>38.1% (693)</td>
<td>1821</td>
</tr>
</tbody>
</table>

\[ (\chi^2) = 0.88, \ df = 2, \ P < .642. \]

The table above does not show significant differences between the geographical region and the respondents use of the drugs, \( (\chi^2) = 0.88, df = 2, \)
The respondents from the Jeddah Region show a slightly higher level of using drugs over the two other regions.

**Current use of drugs by males and females**

The differences between the male and the female respondents use of drugs will be assessed in this section. Cross-tabulation between gender and the respondents current use of drugs is given in table (93).

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug users</td>
<td>2.7% (28)</td>
<td>0.4% (3)</td>
<td>1.7% (31)</td>
</tr>
<tr>
<td>Non users</td>
<td>97.3% (1012)</td>
<td>99.6% (778)</td>
<td>98.3% (1790)</td>
</tr>
<tr>
<td>Total</td>
<td>57.1% (1040)</td>
<td>42.9% (781)</td>
<td>1821</td>
</tr>
</tbody>
</table>

\( (x^2) = 14.20, \, df=1, \, P < .000. \)

The difference between gender and the respondents use of the drugs is significant, \( (x^2) = 14.20, \, df=1, \, P < .0001. \) which means large differences between the males and the females in current drug use. Of all the respondents who are using drugs, 2.7% (28) are male, in comparison to only 0.4% (3) who are female. So it can be concluded that the male pupils use drugs much more than the females.

**Current use of the drugs in the age groups**

The pupils using drugs could vary from one age group to another. This section will discover the differences between the age groups, and will discover which age group has the highest level of using drugs. Cross-tabulation between age and the respondents using drugs is shown in table (94).
The table above does not show a significant difference between age and the respondents' use of drugs, $(x^2) = 2.20, \ df= 3, \ p < .531$. The data itself shows that differences between the age groups is small. This result indicates that all the pupils, despite variation in their age, have a similar level of using drugs. The only difference which should be mentioned is that none of age group four are using drugs. This is interesting when it is related to the figures for trying drugs in the past, which showed that age group four had the highest level of experimentation.

**Current use of drugs in the social classes**

The difference between the pupils' social class and their use of drugs will be examined in this section. The cross-tabulation between the two variables of socioeconomic class and the respondents' use of the drugs is shown in table (95).
The difference between the socioeconomic class and the respondents in the table above is not significant, \((x^2) = 4.57, df=2, p < .101\). This result indicates that the respondents' use of drugs does not vary much between social classes. The upper class respondents show a slightly higher level of using drugs. However, because that increase is statistically not significant we can conclude that the respondents in all the social classes have a similar level of using drugs.

Knowledge of who has stopped using drugs

Social desirability is regarded as one of the most distorting elements of results in social science studies. The Saudi Arabian population in general and the young in particular are very unfamiliar with reporting on very personal issues like drug use. The use of drugs in this country is considered to be a very shameful crime both in the eyes of Islamic law which rules the society, and in the eyes of the general public. As a consequence sensitive questions which ask about personal habits are expected to be met by some resistance and false or incomplete answers. To avoid that and to try to get more valid results different methods have been implemented. This method of assessing the impact of the newspaper coverage of the drugs issue relies on reporting about other people rather than about the pupils themselves. It consists of two questions in an attempt to determine the differences in a) the rates of quitting drug use and b) new involvement with drugs.

This section considers the first of these two questions. It will assess the respondents' knowledge of those who used to use drugs and have recently stopped. The respondents were asked whether they knew anybody in this
situation or not. The result is presented in table (96)

<table>
<thead>
<tr>
<th>Know ex drug users</th>
<th>Do not know ex drug users</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.1% (403)</td>
<td>77.9% (1418)</td>
</tr>
</tbody>
</table>

The table above shows that 22.1% (403) of the whole sample know drug users who have quit recently, while 77.9% (1418) do not know any. It is clear that comparison of this result with each of the last two sections about trying drugs and recent use by the pupils themselves, indicates that avoiding personal reporting could add more validity to the result. When they were asked about their own use of drugs the results indicate a very small percentage of use, but when they were asked about others the results indicate a much higher percentage of using drugs.

The main point of these two sections is to compare between those who have stopped using drugs recently with those who have just started using them regardless of age or whether they are the pupils or their relatives and friends. The result of this section will be compared with the result of the next section to determine the fluctuation between the two results.

It will also be examined together with the variables of geographical region, gender, age, and socioeconomic class.

Recently stopped of drug users in the regions

This section will examine the variations in knowledge between respondents in different geographical regions about who has just stopped using drugs. Cross-tabulations are shown in table (97).
The table above shows a significant difference between the geographical region and the respondents' knowledge of recently stopped drug users, \((x^2) = 16.43, \text{df}=2, P<.0001\). This means there are large differences in the use of drugs between the regions. The respondents from the Jeddah Region show much more knowledge of drug users, 29.6% (117) compared to the other two regions.

**Knowledge of recently stopped drug users among males and females**

This section will examine differences in knowledge of recently stopped drug users between male and female respondents. It gives some indication of the rate of using drugs among females and males. Cross-tabulation is shown in table (98).

The difference between gender and respondents knowledge of who has...
recently stopped using drugs is highly significant, \( (x^2) = 97.1, \text{df}=1, p < .0001. \) That means the difference between the two sexes is very large. The result demonstrates that the male respondents know much more than the female respondents about who has recently stopped using drugs. This result gives some indication of the pattern of drug use between the two sexes, with more among the males.

**Age groups and knowledge of recently stopped drug users**

The differences between the age groups in knowledge of who has recently stopped using drugs will be examined in this section. Cross-tabulation is shown in Table (99).

<table>
<thead>
<tr>
<th>Age grp</th>
<th>Know ex-users</th>
<th>Don't know ex users</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>one</td>
<td>12.0% (45)</td>
<td>88.0% (330)</td>
<td>20.7% (375)</td>
</tr>
<tr>
<td>two</td>
<td>26.1% (225)</td>
<td>73.9% (637)</td>
<td>47.6% (862)</td>
</tr>
<tr>
<td>three</td>
<td>22.5% (118)</td>
<td>77.5% (406)</td>
<td>29.0% (524)</td>
</tr>
<tr>
<td>four</td>
<td>24.5% (12)</td>
<td>75.5% (37)</td>
<td>2.7% (49)</td>
</tr>
<tr>
<td></td>
<td>22.1% (400)</td>
<td>77.9% (1410)</td>
<td></td>
</tr>
</tbody>
</table>

\( (x^2) = 30.45, \text{df}=3, P < .000. \)

The table above shows significant differences between the age variable and the respondents’ knowledge of who has stopped using drugs recently, \( (x^2)=30.45, \text{df}=3, p < .0001. \) The differences between the age groups in this aspect is large. Age group two has the largest percentage of those who know who has recently stopped using drugs, while age group one has the lowest.
Social classes and knowledge of who has stopped using drugs recently

This section will examine the differences between the social classes of respondents and their knowledge of who has stopped using drugs recently. Cross-tabulation is shown in Table (100):

<table>
<thead>
<tr>
<th>(Table 100)</th>
<th>Upper Class</th>
<th>Middle Class</th>
<th>Lower Class</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know ex-users</td>
<td>20.2% (86)</td>
<td>20.8% (165)</td>
<td>25.3% (151)</td>
<td>22.1% (402)</td>
</tr>
<tr>
<td>Don't know ex-users</td>
<td>79.8% (339)</td>
<td>79.2% (629)</td>
<td>74.7% (446)</td>
<td>77.9% (1414)</td>
</tr>
<tr>
<td>Total</td>
<td>23.4% (425)</td>
<td>43.7% (794)</td>
<td>32.9% (597)</td>
<td>1816</td>
</tr>
</tbody>
</table>

\[(x^2) = 5.18, \text{ df}=2, \text{ } P<.074.\]

The difference between the socioeconomic class of the respondents and knowing who has stopped using the drugs recently does not seem to be significant, \((x^2)=5.18, \text{ df}=2, P<.074.\) The table above shows that all the social classes have similar levels of knowing drug users who have stopped.

Knowledge of who has recently started using drug

This section considers the second question which asked the pupils to report about other people using drugs. It will be compared with the previous section which assessed the rate of stopping drugs recently. This section will assess the pupils knowledge of those who have just started using drugs. Comparison between those who have just stopped using drugs and those who have just started gives some explanation of the strength of decrease or increase in drug use in the Saudi Arabian population in general. Respondents were
asked whether they know somebody else who has started using drugs recently or not. The result is presented in table (101).

<table>
<thead>
<tr>
<th>Know somebody who has started using drugs</th>
<th>Do not know somebody who has started using drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.5% (227)</td>
<td>87.5% (1593)</td>
</tr>
</tbody>
</table>

The table above shows the percentage of the pupils who know those who have just started using drugs is 12.5% (227), while 87.5% (1593) said they do not know anyone.

When the respondents were asked whether they knew anyone who had recently stopped using drugs the result indicated 22.1% (403) who said yes. However in this section nearly half that number 12.5% (227) said they knew someone who had just started to use drugs. Comparing the two results indicates that the stopping rate among the pupils’ relatives and friends is double that of starting and new involvement with drugs among the same groups. This result suggests that publishing information about drugs has a strong positive influence. It did not introduce pupils to drugs and did not encourage them to use drugs.

In the next section the differences between the respondents’ knowledge of who has just started drug use according to their geographical region, gender, age and social classes will be examined.

**Knowledge of who has started to use drugs in the regions**

This section will examine the differences between respondents living in the different regions and their knowledge of who has just started using drugs. Cross-tabulation is shown in table (102):

294
This table shows that the difference between the geographical region and the respondent knowing who has recently started using drugs is significant, \( (x^2) = 29.14, \ df = 2, \ P < .0001 \). The Jeddah Region respondents show the highest percentage of knowing who has just started using drugs, 19.9% (75), while the Riyadh Region respondents show the lowest knowledge, 8.1% (59). The Dammam Region has the second highest percentage of knowing who has just started using drugs.

**Gender and knowledge of who has started to use drugs**

This section will examine the differences between the male and the female respondents knowledge of who has just started using drugs. Cross-tabulation is shown in table (103):

\[
\begin{array}{|c|c|c|c|}
\hline
\text{Gender} & \text{Males} & \text{Females} & \text{Total} \\
\hline
\text{Know who has started} & 17.7\% (184) & 5.5\% (43) & 12.5\% (227) \\
\hline
\text{Don't know who has started} & 82.3\% (857) & 94.5\% (736) & 87.5\% (1593) \\
\hline
\text{Total} & 57.2\% (1041) & 42.8\% (779) & 1820 \\
\hline
\end{array}
\]

\( (x^2) = 60.30, \ df = 1, \ P < .0001 \).
The table above shows significant difference between gender and the respondents' knowledge of who has just started using drugs, \((x^2) = 60.3, \text{ df} = 1, p < .0001\). This means large differences between the males and the females knowledge of who has just started to use drugs. The male respondents show much more knowledge than the females.

**Age groups and knowledge of who has started to use drugs**

The differences between the knowledge in the age groups of who has just started using drugs will be examined in this section. Cross-tabulation presents the results in table (104):

<table>
<thead>
<tr>
<th>Age grp</th>
<th>Age grp</th>
<th>Age grp</th>
<th>Age grp</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>one</td>
<td>two</td>
<td>three</td>
<td>four</td>
<td></td>
</tr>
<tr>
<td>Know who has started drugs</td>
<td>7.5% (28)</td>
<td>14.1% (122)</td>
<td>13.7% (72)</td>
<td>8.2% (4)</td>
</tr>
<tr>
<td>Don't know who has started drugs</td>
<td>92.5% (343)</td>
<td>85.9% (741)</td>
<td>86.3% (454)</td>
<td>91.8% (45)</td>
</tr>
<tr>
<td>Total</td>
<td>20.5% (371)</td>
<td>47.7% (863)</td>
<td>29.1% (526)</td>
<td>2.7% (49)</td>
</tr>
</tbody>
</table>

\((x^2) = 11.96, \text{ df} = 3, P < .007\).

The table above shows significant difference between the age groups and knowledge of who has just started using drugs, \((x^2) = 11.96, \text{ df} = 3, p < .007\). This means the respondents vary in their knowledge of who has just started to use drugs. The highest percentage with knowledge is among age group two, 14.1%, then age group three, 13.7%. Age groups one and four have a relatively low percentage.

**Social classes and knowledge of who has started using drugs**

This section will examine the differences between the social classes of
respondents and their knowledge of who has just started using drugs. Cross-tabulation is shown in table (105).

<table>
<thead>
<tr>
<th>(Table 105)</th>
<th>Upper class</th>
<th>Middle class</th>
<th>Lower class</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know who has started drugs</td>
<td>11.6% (49)</td>
<td>12.0% (95)</td>
<td>13.7% (82)</td>
<td>12.5% (226)</td>
</tr>
<tr>
<td>Don't know who has started drugs</td>
<td>88.4% (374)</td>
<td>88.0% (698)</td>
<td>86.3% (517)</td>
<td>87.5% (1589)</td>
</tr>
<tr>
<td>Total</td>
<td>23.3% (423)</td>
<td>43.7% (793)</td>
<td>33.0% (599)</td>
<td>1815</td>
</tr>
</tbody>
</table>

\[(x^2) = 1.29, \text{ df}=2, P < .523.\]

The difference between the socioeconomic class of the respondents and their knowledge of who has started drug use does not seem to be significant, \((x^2) = 1.29, \text{ df}=2, P < .523.\), This gives some indication that the pattern of using drugs in all social classes is similar.

**SUMMARY AND CONCLUSION**

It has been argued by many academic and religious people that diffusion of information about drugs and availability of information to all the population including young people, might have a strong side effect of increasing drug use rather than decreasing it. This section has assessed, by two methods, the probability of an increase or decrease in using drugs as a consequence of the newspaper coverage of the drugs issue. The first method is by asking the pupils about themselves and their use of drugs. The second method is by asking them about other peoples' use in order to avoid any distortion by social desirability.

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In the first section they were asked whether they had ever tried drugs or not and the result indicated that only 3.1% (57) had done so, while 96.9% (1769) stated that they had never tried drugs. They were asked another question about their usage of drugs and the result indicated that only 1.7% (31) admitted to having used drugs recently. Comparison of these two results suggests that the use of drugs has declined among the whole population of the study, 1.7% (31) against 3.1% (57). Another comparison can be made between those who have previously tried drugs but have not used them recently and those who have never tried drugs. The result indicates that only 0.1% (2) of those who have never tried drugs before have become involved in drugs recently, while 47.3% (26) of those who tried drugs before have not used them recently. In other words, new involvement with drugs was only 0.1% (2), while quitting from drugs was 47.3% (26).

For more convincing evidence of the influence of the newspaper coverage on the young people’s use of drugs, the data have been treated by a correlational technique. All variables of the newspaper coverage have been correlated with the respondents trying and current use of drugs to determine whether it has increased or not. That was obtained by multiple regression analysis between the respondents’ general reading, reading about drugs, depth of reading about drugs, awareness, recall, belief and liking of the coverage materials and their trying and using of drugs. The result indicates that there is no significant relationship between any of these variables and the respondents trying and/or using of drugs. So, the involvement with the newspaper coverage of the drug issue has not increased the use of drugs among the pupils.

Based on these two results and comparisons we can conclude that the
evidence of the decline in drug use among the study population is much greater than the increase as a consequence of the newspaper coverage. That means, in my opinion, that the Saudi Arabian pupils seem to benefit from the newspaper coverage of the drugs issue. It also disproves the argument of those who thought the coverage might increase the use among the pupils.

As a second method of assessing the effect of disseminating information about drugs, on the increase or decrease in drug usage, the respondents were asked about other people's use of drugs. In the first section they were asked whether they knew anybody else who had stopped using drugs recently or not, and the result indicated that 22.1% (403) knew someone who had stopped using drugs. In the second section they were asked whether they knew anyone who had just started using drugs. The result indicated that 12.5% (227) said they knew somebody else who had recently started using drugs.

Comparison between the two results of those who had recently stopped using drugs, 22.1% (403), and those who had just started using drugs, 12.5% (227), gives more evidence of a decline in drug use as a consequence of publishing information about drugs. These two comparisons in the first method and the second method can confute the argument that says the newspaper coverage of the drugs issue will increase drug usage rather than decrease it.

That means, in my view, that the people who are older have more experience with drugs. Usually adolescents in many places in the world in similar age groups to the Saudi Arabian pupils use drugs more than other age groups. However these pupils seem to be less experienced than their relatives. It also means the decline in drug use can be seen not only among the pupils
themselves but also among their older relatives and friends. This result can also be seen as a dangerous indicator of how serious is the problem in the society, in my opinion. Most of the Saudi Arabian people do not realize that there is a serious drug problem. But the pupils admission to that number among their relatives and friends shows the extent of the problem in the society in my view.

Examining all aims in this section together with the geographical region variable indicates that the Jeddah Region respondents have the highest level of using drugs in the country, followed by the Dammam region then the Riyadh Region. The males in Saudi Arabia have significantly greater use of drugs than the females according to these results. The pupils do not vary in their own use of the drugs according to their age, but age group two admits to the highest percentage of knowing who has stopped and just started using drugs, followed by age group three, then age group four, while the last one is age group one. The results indicate no significant differences between the social classes use of drugs.

The difference between the regions in use of drugs means that this result supports my view mentioned previously. The Jeddah Region is said to be more open to the outside world than other regions, and I think that is why they came first in the measure of using drugs. The reason behind the superiority of the male pupils over the females is obvious in my view. Basic knowledge or experience of Saudi Arabian society gives enough answers. The men in the country have great domination over the women. For example they can travel when they want and where they want, while the females can not do that without the company of their men. And I think that gives the male more choices, which the women do not have.
CHAPTER EIGHT

Discussion
DISCUSSION

The aim of this thesis was to investigate the effectiveness of the Saudi Arabian mass media anti drugs coverage. The survey which was used to collect the data on which the findings are based was done in 1992. It was carried out in three regions of Saudi Arabia: Riyadh, the capital, Jeddah and Dammam.

The methodology for selecting the sample population of this study as well as the selection of the regions have been fully described in chapter 4.

This chapter of the thesis will be devoted to a discussion of the findings, an explanation of how they relate to the theoretical framework of the study, and to other studies in the field, and whether they support them or not. The findings of the study will be discussed in the order of their importance. Beside the major aims of this study there are several other aims which are also believed to be important. However the major aims will be discussed first then the others findings will be considered.

The main finding is that the Saudi Arabian Government coverage which was conducted through the mass media in general and the newspapers in particular seems to have had some influence on the knowledge and attitude changes in the population of the study.

The data analysis indicates that a majority of the whole sample have knowledge about drugs, 98.4% (1802), while only a very small proportion do not, 1.4% (25). Assessment of the respondents' attitudes towards drugs indicates that the general attitudes of the population of the study are negative, (mean) = 31, std = 9.253, skewness = 1.478. The respondents' attitudes were assessed by the Likert scale of 21 favoured and unfavoured statements, each
one having 5 points. The higher the score the more positive the attitude towards drugs. For example respondents who have a score of 105 points have the highest positive attitude towards drugs and the respondents who have 21 points have the most negative attitude towards drugs. The result of the respondents’ attitudes shown above indicates that the mean of the whole sample (52.5) is below the midpoint of the attitude score which indicates that it is negative toward drugs. Attitude as Fishbein and Ajzen defined is "a learned predisposition to respond in a consistently favourable or unfavourable manner with respect to a given object. (Fishbein & Ajzen, 1975). So, by that definition the negative and positive attitudes of the Saudi Arabian pupils towards drugs in this study refer to whether they like or dislike and accept or do not accept drugs and drugs use in their country.

However, it can be argued that knowledge about drugs and corresponding negative attitudes are not necessarily caused by mass media coverage of the drug problem. In order to investigate the influence of the mass media in general, and the newspapers in particular, on the respondents’ knowledge and attitudes, comparison was made between the respondents who read the newspaper coverage and those who did not. Since the mass media had already started to send information about drugs it was impossible to know the level of the subjects’ knowledge and attitudes before any coverage occurred. Nor was it possible to compare it with knowledge and attitudes after the coverage occurred in order to determine the effects of the media coverage. However, comparison was eventually obtained by using the statistical control approach. As Hennigan and others (1979) advised a large random sample of the study population was selected in order to find differences between them
with regard to the extent of newspaper coverage. In their paper they proved that comparison can be carried out between those who have received different amounts from the treatment with those who did not. They called this the statistical control approach. The method has been described in the methodology chapter. The data analysis shows that from the sample there are some respondents who have received most of the information from the media, some have received some of it, while some of the pupils have not received any of it. The result of that comparison between these groups indicates that the more respondents read about drugs, the more knowledgeable they are about them.

The results in this research show that 99.2% (1497) of those who have read about drugs in the newspapers know about them, and 95.9% (284) of those who have not read about drugs in the newspapers also know about them. Looking at the second percentage group, i.e. those with the 95.9% (284), the impression is given that the percentage is large among those who have not read about drugs. However, the difference between the two groups is statistically significant, \( \chi^2 = 20.03, \text{df} = 1, p<.0001 \). This I suggest emphasises the influence of the newspaper coverage on the respondents' knowledge about drugs.

The first stage of the investigation which was conducted showed the influence of the newspapers' coverage on the pupils' knowledge and attitudes. It was also an attempt to find out whether the coverage had reached them or not. As the first step of that I tried in the previous section of the chapter (5/2.1) to find out the proportion of general reading of the newspapers among the sample of the study. The result of the data analysis indicates that a large
proportion of the study population, 72.8% (1314) read the newspapers. That gave some indication that there was a good chance for pupils to have read about drugs. Whether or not this was linked with the respondents’ knowledge about drugs the results indicate that the differences between the respondents who read the newspapers and know about drugs and those who do not does not seem to be significant, \( (x^2) = 2.59, \text{df} = 1, p < .107 \).

**Theoretical Considerations**

In chapter 2 I mentioned some theoretical frameworks and a particular model which I expected to be the best among the alternatives to conceptualize and explain the attitude change process. In this chapter the chosen model, the information processing model will be discussed in the light of the data of this study to determine how well it worked with regard to the mass media effectiveness. In the second section, I tried to assess the respondents’ specific reading about drugs in the newspapers. The aim was to assess the audience’s exposure to the messages by use of the so called *information-processing* model suggested in the theoretical framework of this study. The result shows that a large proportion of the study population, 83.6% (1514) had read about drugs in the newspapers. That means a majority of the sample had been reached, or what we can call exposed to the newspapers’ message about drugs. Once the target audience reading about drugs had been determined it was time to measure their comprehension and interest. I assessed that by measuring the level of the respondents’ interest and their liking, satisfaction with, and their belief in what they read. The results indicate that the majority of the respondents liked the means of presenting messages about drugs - only a small
proportion of the respondents thought otherwise or answered that they did not know. With regard to the respondents' beliefs about drugs the data indicates that respondents who did not believe in the media information are only 1.9% (35) of the whole sample. Those who do not know are 14.6% (265). The remainder of the sample believed what they read or strongly believed it.

Other evidence of the influence of the newspaper coverage of the drugs issue on the respondents' knowledge about drugs was found by examining their awareness of the drugs coverage. The result of this analysis indicates that the respondents who are aware of the drugs coverage vary significantly. This supports the evidence of the effect of the newspapers on the respondents' knowledge about drugs. The principle of learning in general can be explained by many theories in social psychology. However, learning from the mass media in particular and how it occurs can, in my opinion, be explained by the information processing model.

The information-processing model

The information-processing model consists of 5 communication factors and 6 steps of the change process. The best explanation of this model can be seen in the McGuire's persuasion matrix of the change process, as shown in figure 1 in the chapter 2 of this study. The columns of the matrix represent 5 independent variables (input variables). The rows of the matrix represent 6 dependent variable (outcome variables) in the attitude change process. The independent variables are:

1)- Source factor- the attributes of the perceived source of the message.
2)- Message factor- the content of the information being presented, its
style and structure.

3)- Channel factor - the medium through which the message presented
4)- Receiver factor - the target audience who receive the message.
5)- Destination factor - the desirable target issue by the communicator, such as certain attitudes or behaviour.

Each of these independent variables has considerable effect on the communication process, and on the attitude change process.

The six McGuire matrix rows or dependent variables are:

1)- Receiving the message (exposure).
2)- Attending to the message (awareness).
3)- Comprehending its content (knowledge).
4)- Yielding to its appeals (belief/attitude).
5)- Retaining this new position (persistence of attitude change).
6)- Acting on the basis of it (behaviour).

It would appear to be easy to change somebody's awareness and knowledge about any specific topic as long as he can be exposed to some information about that topic. (Flay and Schlegel 1980). In the evaluation, measuring level of exposure seem to be essential, however there were many educational programmes which did not achieve their goals simply because their target audience, or those who were intended to be their target audience, did not receive their messages (Flay and Schlegel 1980). For this reason and to ensure this major step in the change process, (exposure), many factors should be considered by the communicator, such as selecting a popular medium and proper timing. To insure exposure for example, advertising messages are presented as novel, shocking or entertaining. For changing the target audience
knowledge, they must be motivated to attend and comprehend the information. So if these factors are met the mass media would seem to have an influential role in improving knowledge parallel to face-to-face communication, but it is much more cost effective than other methods as a result of the extent of its coverage and its large audience. (Flay and Schlegel 1980) The information-processing model supposes that exposure to the message with a certain level of attention and comprehension will increase knowledge and will change it. Based on that model it was hypothesised that if the respondents have been reached by the message, and were exposed to it, then their knowledge will necessarily be changed. To assess that, a comparison between the respondents who were exposed to the newspapers' message and those who were not, took place. The data analysis indicates that the respondents who have been exposed to the messages are significantly more knowledgeable about drugs than those who have not been exposed to the message. \( (x^2) = 20.03, \text{ df} = 1, p < .0001. \) This result supports the previous hypothesis which says exposure with comprehension and attention to the message will lead to knowledge change among the audiences. This result not only supports the information processing model but supports the use of the McGuire matrix described in chapter 2.

The theory used in this study assumes that changing the audiences' knowledge will automatically lead to change in their attitudes. However, there are some arguments against the McGuire matrix and the assumption based on it. Kinder (1975) after reviewing much of the literature in the area indicates that such a clear relationship between knowledge change and attitude change does not in fact exist.

One of these arguments is a radical departure from the information-processing
model. As the McGuire matrix shows, change in attitude is a result of change in the knowledge of the target audiences and that is a fundamental step in changing their behaviour. However Kinder's argument contradicts the McGuire matrix and suggests that target behaviour can be considered only as a first step of change. Then, if the respondents accept or at least practise the target behaviour then their attitudes will be changed and justified accordingly.

The positive behaviour of the respondents in Saudi Arabia must be considered here. The religion and tradition of the society rejects drugs and does not tolerate drug users, but that has nothing to do with the newspaper coverage. The mass media in general and the newspapers in particular, have carried a persuasive message about drugs but of course this does not force them to avoid drugs. The data found here supports the information-processing model and the McGuire matrix as it emphasises that knowledge and attitude changes were a result of dissemination of information about drugs and involved reaching pupils by that method (exposure). Pupils who received coverage and were exposed to the message have different knowledge and attitudes to drugs from those who did not receive the messages.

This argument has some similarities, with Ray's (1973) suggestion about what he calls the change process. He suggests that there are three possibilities for the change process. They are the learning hierarchy, the dissonance-attribute hierarchy and the low-involvement hierarchy. The appropriateness of each of these possibilities depends on the target audience's involvement in the issue under discussion, and the level of difference between alternative target behaviour or choices. The learning hierarchy described by Ray starts with change in the target knowledge acquisition, that is then followed by change in
attitudes, and that will lead to change in behaviour.

\textit{Knowledge Acquisition-Attitude Gain-Behaviour Change}

For the learning hierarchy to occur there should be high level of involvement in the issue, which has already been discussed. Also the differences between the alternatives should be clear to the message receivers. As a consequence the knowledge and belief of the target audience will be changed first, this will lead to an attitude change, and finally the behaviour will change automatically. This order of change is known as cognitive-affective-conative. Many studies have shown that health issues and drugs in particular, create high involvement with target audiences. In their campaign the Saudi Arabian mass media advocated non involvement with drugs, which is very clearly the opposite alternative to drug taking, the data indicate that increase in knowledge has led to changes in attitude.

In changing the target audience’s attitude Flay and others (1980) summarise the most conducive conditions to have a meaningful change such as: arousing their motivation and involvement in the issue, lengthy coverage and repetition of the message through multiple media, by several reliable sources of information and the quality of the message and its ways of presentation. There are some other conditions which seem to be conducive to meaningful and persistent attitude change such as fear appeals arousal for some receivers who are less anxious than others (Flay and Schlegel 1980). These conditions seem to be consistent with the learning hierarchy and the information-processing model and with the Saudi Arabian mass media coverage of the drug issue to some extent. This learning hierarchy is supported by data from this study. The only difference being that although both the first two steps of the learning hierarchy have been
supported by the results of this study the population behaviour does not come within the scope of this study. For health promotion campaigns, including drug prevention, the learning hierarchy order, which corresponds with the information-processing model assumption seems to be the most appropriate explanation of the change process, (Flay 1981). Changing behaviour relevant to health involves highly differentiated alternatives. In this study the use of drugs is highly differentiated from the opposite alternative which is non use of drugs or quitting drug use. That is why the learning hierarchy and the information-processing model are considered to be ideal for drug prevention campaigns in the Saudi Arabian mass media.

The second feature, the dissonance-attribution hierarchy, has a different order. The first step is to start with behaviour change. Then it is necessary to change attitudes, for that will create knowledge among the target audiences.

**Behaviour-Attitude-Knowledge**

For the dissonance-attribute hierarchy to occur there should be a high level of involvement in the issue, however the difference between the alternative choices is not clear or is very small. This is quite different from the above mentioned learning hierarchy. For example choosing between two different kinds of jobs: deciding to take the first job, causes a certain attitude towards it, which then produces curiosity and the desire to acquire some information about the job. So, first it starts with choosing the job, then that causes an attitudinal commitment to it, and that produces the need for information. That is known as a conative-affective-cognitive order. However this order does not seem to apply to this study because it lacks differences between the alternatives.

The third and the final step suggested by Ray, the low-involvement hierarchy,
starts with a change in knowledge that leads directly to change in behaviour, then attitudes will follow which will in turn be justified.

**Knowledge-Behaviour-Attitude**

For the low-involvement hierarchy to occur the involvement in the issue is low and the difference between the alternatives is minimal. That often happens in consumer situations, such as choosing between two different kinds of junk food which have only slight differences, but are familiar from continual advertising. That causes an attitudinal position towards that food whether positive or negative, and which is known as cognitive-conative-affective order.

As mentioned before, none of the second and third of these steps received support from the present study.

*Flay and Schlegel* (1980) have argued that change in knowledge, attitudes and behaviour do not necessarily occur in the same order as the matrix. They said change in attitude could come without change in knowledge, and sometimes behaviour could occur without change in knowledge or even attitudes. This supports the argument which was mentioned before to some extent. However, this study does not attempt to measure the population behaviour. The main argument of this study is to determine whether the newspaper coverage of drugs has any influence on the respondents’ knowledge about drugs and their attitudes towards them. The result of this study emphasises that point and supports it. That does not mean I reject the idea of changing behaviour without changing attitude or knowledge, but the data of the present study emphasises the *McGuire* matrix and assures that publishing material about drugs in the newspapers in Saudi Arabia did have influence on the Saudi Arabian pupils’ knowledge about drugs. Moreover it changed their
attitudes to become more negative towards drugs.

Increasing knowledge about a topic, as a feature of attitude change, is an important key. However, the most important element of the success of any campaign is the ability of its target audience to maintain and recall the materials. The *McGuire* matrix emphasised that point as an important step leading to behaviour change. Yet whilst knowledge of the respondents of this study was assessed, it was thought to be important also to know whether that knowledge is good enough to be maintained and recalled. That was examined by asking the respondents to report the names of all the drugs they could remember. The data analysis shows that 15.8% (287) are considered to be high recallers, while 48.9% (891) are moderate recallers. The only respondents who did not recall anything from the coverage materials were 35.3% (642). This result indicates the influence of the newspaper coverage on the pupils and shows its success. With 64.7% of the population being high or moderate recallers this result can be said to indicate that the influence of the newspaper coverage on the pupils was successful.

*Flay and Schlegel 1980* made another suggestion to explain the change process. They extended the information-processing model to give more possibility of conceptualization and to include some other supportive factors, particularly when increasing knowledge lead to attitude change. That can be seen in figure 2 in chapter 2 in this study. They suggested that exposure to the message will create awareness, but only when the message is attended to. Awareness about the issue will create knowledge about it, but that is only when the message is comprehended. That knowledge will lead to change in belief, and then acceptance of the message facts, finally that will create a certain
attitude towards it (Flay and Schlegel 1980). Experience during this research suggests that this model is correct.

There is another suggestion by Kline and Pavlik (1980) to explain the information-processing model and how change occurs. They assume that communication is not a perfect process. They argued that the source of information cannot always deliver as precise a piece of information as is wished. Even if it is well delivered, the whole communication process cannot be completely controlled. The target audience may not pay attention to the messages. Their view of the communication process is explained by the diagram number (10).

The shaded part of each circle illustrates when communication is perfect, while the non shaded parts represent uncontrolled communication. The success of the communication is, therefore, represented by the size of the shaded part of each circle, while a failure to communicate can occur at any point in the non shaded areas. The diagram explains the information-processing model and how
it works in the case of this study. The amount and extent of the materials which was sent to the Saudi Arabian pupils through the mass media can therefore give some indication of how large the shaded areas should be in circles A and B. The shaded area of the circle C, which is the channel, seems to be large and that is supported by the large amount of coverage materials which were received by the target audience, 83.6%. In circle E I can indicate by the shaded area the extent of the receivers understanding and absorption of the meaning of the message. In the case of this study the present data shows that the majority of the respondents (74.0%) liked the coverage. In addition, the data shows that 83.4% of the respondents believe in the coverage material. These two results are a good indication of the respondents understanding and absorption of the messages. However, although the Kline and Pavlik model gives a clear explanation of the chain of communication through the source, message, channel, receiver, to the decoding of the message, it does not explain the change process. It explains how far the source delivers the information and how far the receiver got that information correctly. It does not explain whether that information had any impact on the receivers knowledge. It also cannot explain whether, if the knowledge is increased it will affect the attitude or not.

In summary the Saudi Arabian mass media have disseminated a lot of information about drugs, and that was received by the target audience on a large scale. This is the exposure step. The target audience who received the materials about drugs were interested, liked and believed them, and that can be seen as proof of attention and comprehension. That produced awareness and knowledge. The last stage is claimed to have been assessed in this study, their
attitudes towards drugs have been measured and found negative. These steps of assessment are consistent with the information processing model and give clear evidence of its validity so that it can be used as a guideline for designing and constructing new campaigns in the mass media. It also proves its validity for evaluation research in this matter.

Other relevant aspects

During this investigation, some other aspects were believed to be relevant. These factors are not drawn from the theoretical framework of the study, but they are very close to it. They concern first the families’ encouragement of their children to read about drugs and to gain knowledge about them; second to make a connection with other cultures and to assess the influence of that on the respondents’ knowledge about drugs; third to assess any side effects of the newspaper coverage on the pupils’ use of drugs, and finally to determine the difference between the pupils according to their regions, gender, age and social classes.

The assessment of the families’ encouragement on gaining knowledge about drugs was done by examining three points: the families’ reading of the newspapers, their talking and discussion with the pupils about drugs and their advice to them to read about drugs. Each of these points was cross-tabulated with the respondents’ general reading, specific reading about drugs, depth of reading about drugs, awareness, and knowledge about drugs. The result of the data analysis indicates that all the families’ members had some influence on the pupils’ reading about drugs, with the exception of the mothers. The pupils’ knowledge about drugs was significantly associated with most of their family
members' reading of the newspapers. This is an indication of the influence of Saudi Arabian families on the pupils' knowledge about drugs. Also the data shows that pupils talking and discussion about drugs with their families has some influence on their general reading. It adds another feature to the debate on the influences and encouragement of the families on their children to read about drugs and gain knowledge about them. Although the respondents who had been advised to read about drugs were fewer than those who had not, the result indicates that the family advice to their children to read about drugs did seem to increase the level of reading among the pupils.

A relationship with other cultures was the second relevant aspect to this study. It was hypothesised that travelling to other countries and making connections with other cultures had some influence on the respondents' knowledge about drugs, in that the travellers were expected to have more knowledge than the non travellers. However, that hypothesis was not supported. Travellers did not vary from non travellers in their knowledge about drugs.

The third and final aspect examined here was the pupils use of drugs and whether the coverage increased it or not. Publishing material about drugs had been debated by many people. Some thought it would have side effects and would introduce the drugs to many youngsters who had never heard about them. I investigated that aspect by examining four points. The first method was to ask the pupils about their own use and second to ask them about other people's use of the drugs.

The respondents were asked whether they had ever tried drugs in their lifetime. The result indicates that 3.1% (57) of the whole sample had tried drugs. The second question asked the respondents about their recent use of
drugs. The result shows that only 1.7% (31) of the whole sample had used drugs recently. Comparison between the two results gives some indication of a decline in drug use among the pupils, at least it did not increase as a consequence of the newspaper coverage of the drug issue. The argument which says that drug use might increase as a consequence of the newspapers disseminating information about drugs was not supported by the data of this study.

In order to determine the rates of stopping drug use among the recipients of the newspaper coverage of the drug issue, a comparison between the respondents who had tried drugs sometime in their lifetime but had not used them recently and those who had not tried drugs in the past, but had used them recently was made. The result indicates that only 0.1% (2) of the respondents who had not tried drugs in the past had used them recently. In the meantime the respondents who had quit using drugs were 47.3% (29). So, from these results I can show that the decrease of drug use among those who had previously tried drugs is much bigger than the increased drug use among those who had not tried drugs. These results give some indication that dissemination of information about drugs seems to have positive rather than negative effects on the pupils' use of drugs, which helps to reject the argument that the coverage introduced young people to drug use.

Because of the sensitivity of the issue among the Saudi Arabian population on account of their religion and traditions different methods were tried to assess the side effects of the drugs coverage on the pupils use of drugs. In an attempt to obtain a more valid result and to avoid the influence of social desirability the respondents were asked about other people using drugs instead
of asking them about themselves. They were asked to report whether they knew somebody else who used to use drugs and had stopped using them recently. That was thought to give some indication of the stopping rate of drug use among the population. The result indicates that 22.5% (403) of the whole sample knew somebody else who had just stopped using drugs. The second question was about the respondents' knowledge of anyone who had recently become involved with drugs. That was thought to give some indication of the recent use of the drugs within the society. The result shows that 12.5% (227) of the whole sample knew somebody else who had used drugs recently. Comparison between the two results shows that the percentage of stopping drugs is much more than the percentage of new involvement with drugs. This is another indication that the newspaper coverage of the drugs issue does not seem to increase the use of drugs among the pupils.

Relevance to other findings in the field

The effectiveness of the mass media in general, and on drug prevention in particular, seems to be uncertain. The findings of this study indicate that the Saudi Arabian newspaper coverage of the drugs issue does have influence on the populations' knowledge and attitudes toward drugs. This contradicts Capalaces and Starr's (1973) study, which reported that the PSA announcements in the USA were not effective. In their study they believed that fear appeals and anxiety were a cause of the negative result. However, in this study the content analysis of the coverage message shows that fear is a relatively big proportion, 38.2% (148). This could be because of cultural differences between the USA and the Islamic culture in Saudi Arabia with
regard of availability of drugs and its statues in each of them. They also found a major problem in their study was that the appropriate audiences were not exposed to the message, while I found that the majority of this study population had been exposed and received the coverage message. In my opinion, this particular point is an important key to the difference between the two studies.

All the mass media prevention programmes rely one way or another on a certain model or theory for achieving their objectives and effectiveness. This particular study shows that the public service announcements under the study were not effective because the themes of the messages were not related to the receivers, whereas the messages in the Saudi Arabian campaign were directed specifically at the target audience.

My findings also counter argue, to some extent, the Hanneman study (1973) of the sources of information about drugs. His result indicates that public service announcements have little effect, and he attributed that to non specific information and improper timing. This lead to a lack of enough exposure to the messages, which is a major key to the change process. This is an important difference between the two studies since the Saudi Arabian newspapers coverage of the drugs issue have been exposed to a large majority of the pupils. Another problem which affected the public service announcements relied on their themes. The messages suffered from a lack of specific information about drugs, but the Saudi Arabian messages were subject specific as is shown in part one of the result chapter.

The study by Smart and Fejer (1974) of the drugs prevention programmes also do not receive support from the findings of this study. In their findings they concluded that the anti-marijuana programmes had little impact
on the high school pupils under the study. However, the data of this study indicates that, respondents with a similar level of education, high school pupils, have been affected by the newspaper coverage of the drug issue. In my opinion the major differences between the two studies lies in the differences between the two populations of the studies. Smart and Fejer found that their target audience did not react to fear appeals for drugs with which they were familiar. However, with an unknown drug a high level of fear appeal worked more than a low fear appeal. The majority of the population of this study were not familiar with the drugs which were presented to them with fear appeals by the newspapers which may account for the high level of response.

This study also contradicts the Ray and Ward study (1976). They assessed the interest and recall of their study population and their attitudes towards drugs. They concluded that many older teenagers opposed the message of the prevention programme. Although the present study has assessed similar aspects, which are the pupils level of exposure to the newspapers coverage of the drugs issue, their interest in its materials, their knowledge and recall of that materials, and their general attitudes towards drugs, it produced different results. The differences between the two studies can be attributed to the differences between the two cultures and experiences of the two populations. In their study the researchers reported that the older teenagers resisted the messages, and that, in my opinion, was because they have more experience with drugs than the younger teenagers, or at least have more knowledge about them. In their study they did not mention that the young teenagers were opposed to the messages, and that was thought to be because the messages were new knowledge to them according to their age, so that is why they had some
effect. That can be clarified by Smart and Fejer's (1974) study. In their experiments they exposed their target audience to a message about unknown false kind of drugs called M.O.T. Because the receivers were not familiar to that kind of drugs the message with some fear appeals was more influential. The population of the present study also has little experience with drugs, because this problem has only recently appeared in Saudi Arabia compared to the USA, the place of Ray and Ward's study, and so age is not such a relevant factor.

A laboratory-style design by Feingold and Knapp (1977) is also challenged by the findings of this study. They used the same instrument as this study, for assessing the study population attitudes, which was the Likert's Scale. They found that the anti-drugs prevention programmes were not affected, and that due to the heavy use of fear appeals in the prevention programmes, in my view.

It also counter argues the Hanneman examination of the television and radio public service announcements. Concerning the attitudes and behaviour between the adults of different gender. His findings indicated little difference. This study however, found that the female respondents had more negative attitudes towards drugs more than the males had. This may be a reflection of the cultural and educational differences between males and females in Saudi Arabian culture.

All the studies mentioned above have different findings from the present study with regard to the mass media effectiveness. They concluded in some of them, that using the mass media for prevention of drug abuse has little or no effect. However, this study found that the Saudi Arabian mass media coverage
of the drugs issue influenced both the pupils' knowledge and their attitudes. The differences in the findings may also be the result of the different methodologies used for the surveys.

There are other studies which are supported by the findings of this study. A study by Irgens-Jensen and Brun-Gulbrandsen (1971) in Norway received full support from the present study. They found that the message reached a large proportion of the population of the study, and that their attitudes were strongly negative towards drugs. That is similar to this study, in spite of completely different cultural contexts, which found a strong relationship between the reach of the coverage and negative attitudes.

Another study by Fejer, Smart, Whitehead and LaForest (1971) has been supported by the finding of this study. Their findings indicate that the mass media was the most important source of information about drugs. Similarly this study found that the mass media is regarded to be the most important source of information about drugs for the Saudi Arabian pupils.

This study also supports and agrees with the Goldstein study in (1974). His finding indicates that the mass media is an effective tool for teaching about drugs. This is similar to the result of this study which emphasises that point.

Another study supported by the result of this study is an experimental style-design study by Wong and Barbatsis in (1978). After assessing the effectiveness of the mass media with some other variable such as groups of discussion, they found the effectiveness of the mass media to be significantly clear. Similarly this study reached the same result concerning the significance of the mass media.

The result of the Leather and Squair study (1985) in Scotland indicates
that the campaign which they studied seemed to induce a high level of awareness, especially among the young people and their parents. Their general conclusion suggested that the mass media was successful in creating knowledge and attitude change. This result has similarity with the present study which found significant increase in the knowledge among its population affecting attitudes towards drugs in Saudi Arabia.

There are many other groups of studies in the effectiveness of the mass media. These are by researchers who have studied the mass media but with some other variables. Most of them support the effectiveness of the mass media, but in combination with other programmes, not alone. One of these studies, for instance, is the study by Sussman and others of the drug prevention programmes, "Don't Be Dope". Their findings indicate that the mass media was effective, but only when it was supported by parents viewing programmes and education school prevention programmes.

Another kind of study concluded that the mass media can be effective but only when it is supported by face-to-face communication programmes, such as the study by Flay and others 1987. These findings are supported by this study which found that variables such as parent's encouragement of their children's reading about drugs was significant.

**Implications of this study**

Reviewing the literature on mass media effectiveness shows that agreement on the best strategy among specialists in the area is difficult to reach. Many studies indicate the weakness of the mass media while others
advocate using them in drug prevention because they are influential tools. This study supports this latter point of view. The studies which were contradicted by my findings were mainly concerned with the message content, whereas those which are supported are more to do with the means of delivery, and the receiver population. The prevention coverage which was carried out in Saudi Arabia emphasises the society values such as religion and tradition. In Saudi Arabia taking drugs is regarded as a very shameful activity. Reviewing the theories in this area indicates the most important key for making the mass media into effective tools is concerned with the nature of the receivers.

All these studies have been carried out in different developed countries such as Britain, USA, and Australia. These kinds of educational programmes have been used for quite a long time in these countries. For example, in the USA the mass media anti drug abuse programmes go back to the early 1930s. That gives them experience of using the mass media correctly. There has been much academic research to evaluate them in terms of their effectiveness on the target audiences. The results of these studies have been utilized by the policy makers and the mass media organizations in these countries.

**Recommendations for further study**

In Saudi Arabia this kind of education programme through the mass media has only recently been used. Previously all publications about drugs have been supplied by the government. Drug prevention in Saudi Arabia did not involve any publications before this and it was conducted in secret by the police. Because involvement with drugs in Saudi Arabia seems to be recent the whole population were expected to know little or nothing about drugs. This
mass media experience has, therefore, to be examined to find out if it was useful or was just a waste of time and money or was even actually harmful. The policy makers and the mass media organizations in Saudi Arabia will be able to utilize the results of any research in this area. The result of this study indicates that the newspaper coverage of the drugs issue has influenced the Saudi Arabian pupils' knowledge about drugs and their attitude towards them positively. Based on that result such education prevention programmes should be encouraged to continue.

There is one other very important aspect which needs further investigation and more research. The behaviour of the Saudi Arabian pupils with drugs has not been covered by this study. In the near future there should be a study to investigate how these publications have affected the whole populations' drug taking behaviour in Saudi Arabia. This information can only be obtained by studying the appropriate records of the police and customs departments, noting the levels of drug use before and after distribution of these publications. Comparison between the two sets of data could shed some light on the extent of drug use among the Saudi Arabia population.

The information-processing model which was designed and developed in a western society, very different from the place of this study, has been used in studies to show that knowledge is a major key for changing attitudes and behaviour. It has also been used to show exactly the opposite in studies carried out in western countries, where there were many different sources of information about drugs which present the drugs in a variety of ways. There may be many reasons for this, for example in advertising and films in these countries alcohol and drugs do not seem to be very shameful things they are
even used by the film’s heroes. That can decrease the effects of the mass media campaigns, indeed sometimes it can cause the opposite effects to those desired by the campaign organisers. Wallack (1970) reported that it was likely that the mass media encouraged the use of drugs. For example, in the northeast of England, hundreds of thousands of pounds were spent from 1974 to 1979 in alcohol prevention programmes, but a later survey indicated that the males in the region still had the highest consumption of alcohol in the whole United Kingdom. (Barber, Bradshaw and Walsh 1989). However, some of these studies which did not support the model did not measure all the steps of the McGuire matrix. They may search for the main objective of the prevention programme which is usually changing the target behaviour, but not other important points such as sufficiency of exposure. At the same time most of the prevention programmes being evaluated did not necessarily follow and were not based on the McGuire matrix, for example, a high percentage of the Public Service Announcements were broadcast when most of their target audience were in school. (Hanneman, McEwen, Coyne 1973). That is a major weakness of some prevention programmes because even if the message is good enough, it can not work because it has not been seen by the target audience. So when the evaluators investigate the effect of a drug prevention programme by the mass media and find it ineffective they conclude it is because of the weakness of the model and relate this to the mass media as a whole. However, in my opinion they did not discover the weaknesses of the prevention programmes, whether they are within reach of the target audience, whether the audience has any interest in the topic, or whether the information is specific and accurate enough. For example, most of the target audience of one prevention
programme did not believe or trust the sources of information. They believed that all of them were using drugs. That demolished the credibility of the source of information among the receivers and as a consequence the effect of the prevention programme. So, all these matters must be evaluated to find out if there is weakness in the prevention programme.

The 'magic' effect of advertising in marketing and how it influences consuming behaviour in the western world is well known. It is based on presenting information about certain goods to increase knowledge about them. In Saudi Arabia the situation is different. Advertising about alcohol and films with drugs does not exist in the media. The strength of shame in using drugs induced by religious and traditional points of view is much greater in Saudi Arabia than in western societies. Another important aspect concerns the religions of the two different cultures. All the studies which did not support the information-processing model were carried out in christian based societies. In Christianity the fear of punishment for doing anything wrong is not so strong. The philosophy is more based on love and care for sinners. So, campaigns which use fear appeals are less likely to have big influences. Islam on the other hand emphasises morality and very strongly emphasises the fear principle and punishment for those who break the law or do something wrong such as using drugs. Thus the atmosphere of accepting information based on fear is much more acceptable in an Islamic culture, such as Saudi Arabia. The Saudi Arabian mass media coverage of the drug issue did not present things in an unfamiliar way to the target audience or against its religion or tradition, it only emphasised the values of the society. In this case, when the mass media publishes or broadcasts materials to support the values of the society it is very
likely to be successful in achieving its goals. So the information-processing model seems work well for the Saudi Arabian mass media. By doing this study I found that the target audience was reached by the messages and their attention was gained. The knowledge of the target audience was increased as a consequence. The result of the measurement of their attitudes indicates that they have negative attitudes toward drugs. That very clearly supports the information-processing model and the significance of the mass media in drugs prevention.

Doing this research in a closed society, to some extent, like Saudi Arabia is a good chance to prove the validity of the information-processing model and the significance of the mass media as a whole when it does not have other channels to contradict it. The findings of this study can reinforce decisions by the Saudi Arabian government to use the mass media as an important factor in the change process and can develop the knowledge of how to use it well, directed at the right people, through the right medium at the right time. For addressing further campaigns the Saudi Arabian mass media should employ the source of information most trusted by the Saudi Arabian pupils. These were found to be the religious leaders and doctors. There are many other problems in the country which could be addressed by media campaigns such as bad driving among the young people which results in a high death rate. The usefulness of the findings are not only of value within Islamic based cultures but can also be of interest for western societies with significant muslim minority populations, by increasing understanding of how such target audiences can be approached to achieve maximum response to information campaigns.
APPENDIXES

1)- Coding sheet for newspapers
2)- Coding sheet for television programmes
3)- Coding manual for the content of the newspapers
4)- coding manual for the television programmes
5)- Coding manual for the survey
6)- The questionnaire in English
7)- The questionnaire in Arabic
Appendix One

Coding sheet for the newspapers

<table>
<thead>
<tr>
<th>Case number</th>
<th>Day</th>
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<th>Year</th>
<th>Paper name</th>
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<th>Ph. subj.</th>
<th>Colour</th>
<th>N. or In.</th>
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<td>14</td>
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<th>Aims</th>
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<td>24</td>
<td>25</td>
<td>26</td>
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</table>

<table>
<thead>
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<th>Inf. source</th>
<th>Style</th>
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Appendix Two

Coding sheet for the television programmes

<table>
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<th>Duration</th>
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<td>7</td>
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<thead>
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<th>Rep.Day</th>
<th>Rep.Mont</th>
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<table>
<thead>
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<th>Status</th>
<th>Fear Appeals</th>
<th>Style</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
</tr>
</tbody>
</table>
Appendix Three

Coding manual for the newspapers

1- Headline of the item, if stated is to be written in this space.

2- Case Number
   Columns(1-3) Case number. Every article related to drugs has one coding sheet with a case number.

3- Date
   Columns (4-9). The date of the article. Take the date of the newspaper; Codes 4-5 are for the day, 6-7 are for month, 8-9 for the year.

4- Newspaper Names
   Column (10) The name of the newspaper.
   (1) Riyadh newspaper
   (2) Okaz newspaper
   (3) Jazerah newspaper
   (4) Yamamah magazine

5- Item size
   Columns (11)
   (1) the item is one whole page
   (2) the item occupies the top half of the page
   (3) the item occupies the bottom half of the page
   (4) the item occupies the top quarter
   (5) the item occupies bottom quarter
6-Photographs

Column (12) Number of photographs with the article.
(0) means no photograph with the article.
(1) means one photograph with the article.
(2) means two photographs with the article.
(3) means three photographs with the article.

7- Photograph subject.

Column (13)
(1) the article’s writer photograph
(2) conference
(3) a photograph of an addict
(4) accident
(5) picture of action against drugs (e.g., police action)
(6) a police photograph
(7) Head of Police photograph
(8) dead people.
(9) illustration, cartoon.

8- Colour of the photograph with the article

Column (14)
(0) There is no photograph
(1) The photograph is without colour.
(2) The photograph is with colour

9- Place of event,

Column (15)
(1) national
(2) international

10- Page number.
   Column, (16)
   (1) the article is on the front page.
   (2) the article is on the back page
   (3) the article is in the first quarter.
   (4) the article is in the second quarter.

11- Position of the item on the page.
   Column (17) position of the article in the page.
   (1) the article occupies the whole of the page.
   (2) the article occupies the top half of the page.
   (3) the article occupies the bottom half of the page.
   (4) the article occupies the corner of the top.
   (5) the article occupies the corner of the bottom.

12- Type of article,
   Column (18)
   (1) news
   (2) feature article
   (3) editorial
   (4) letter
   (5) report
   (6) others
   (7) seminar

13- At whom the article is aimed,
   Columns (19-20)
(1) the whole population explicitly.
(2) the whole population implicitly.
(3) all the males in the country explicitly.
(4) all the males in the country implicitly.
(5) all the females in the country explicitly.
(6) all the females in the country implicitly.
(7) the elderly explicitly.
(8) the elderly implicitly.
(9) the young people explicitly.
(10) the young people implicitly.
(11) the parents explicitly.
(12) the parents implicitly.
(13) the pupils explicitly.
(14) the pupils implicitly.
(15) the aim of the item is not clear. (general)
(16) drug users
(17) drug dealers

14. Author of the item,
   Column (21-22)
   (1) politician
   (2) policeman
   (3) academic
   (4) student
   (5) businessman
   (6) the media editor
   (7) ordinary person
   (8) a media editor
(9) foreign media correspondent
(10) physician
(11) religious scholar
(12) ex-addict

15- Theme,
Columns (23-24)
This is to assess the main issue in the item.
(1) health factors.
(2) law and punishments.
(3) social problems.
(4) connection with other crimes.
(5) other relevant problems (e.g., why they involve drugs)
(6) religion
(7) international drug events.
(8) kind of drugs (e.g., how they are produced, from which country.)
(9) finance
(10) more than one subject

16- Secondary theme
Column (25)

17- Status of Drugs in the article,
Column (26)
(1) the main theme
(2) secondary importance
(3) the main theme of the article is about something else but drugs are
  mentioned marginally or incidentally.
18. Fear appeals,
Column (27-28).
(0) no mention to indicate fear appeals.
(1) using words about sickness.
(2) using words about diseases.
(3) using words about high level of pain.
(4) using words about suicide.
(5) using words about accidents.
(6) warning of killing other people.
(7) using personal references, such as 'it could happen to you'.
(8) using words such as, 'it will kill you', 'it will damage your family', etc.
(9) warning of poverty
(10) threat to the public security
(11) mention of terrorist activity
(12) mention of family disruption
(13) mention of prison

19. Persons in the article,
Columns (29-30).
(01) head of police.
(02) other high ranks of police.
(03) other ranks of police.
(04) high level of religious scholar.
(05) other level of religious scholar.
(06) the King.
(07) the Crown Prince.
(08) the Internal minister.
(09) other ministers.
(10) a city governor.
(11) an academic.
(12) doctor.
(13) famous writer.
(14) sports player.
(15) actors.
(16) singers.
(17) foreign head of state
(18) foreign politician
(19) foreign policeman
(20) businessman
(21) addicts

20- Sources of information,
Column (31).
(1) local source.
(2) Arabic source.
(3) international source.

21- Style,
Column (32)
(1) direct advice such as 'don’t touch drugs, they will kill you, make you an addict, etc.
(2) story .
(3) news.
(4) comic.
(5) cartoon.
(6) academic (research, seminar, etc..)
Appendix Four
Coding manual for the television programmes

1)- Case number

Columns (1-2) are for case numbers. Each programme is listed by the television administration and related materials are given a case number. A programme which has more than one episode or series but under one title still has only one case number.

2)- The date

Columns (3-6) are the date of broadcasting of the programme for the first time. The only date taken here is the first date of broadcasting of the materials regardless of its series number or repetition.

3)- Viewing time

Column (7) is for viewing time or broadcasting time of the programme and at which time during the day the programme was broadcast. This is divided into 4 categories.

(1)- from the beginning of transmission in the morning until 3:00 o’clock in the afternoon (10.00- 3:00).
(2) - from 3 o’clock until 6 o’clock in the evening (3:00- 6:00)
(3)- from 6 o’clock until 10:30 at night. (6-10:30)
(4)- from 10:30 until the end of broadcasting (10:30- 1:30 or 2 o’clock)

4)- Duration.

Columns (8-9) are for the duration of viewing or length of the programme. This has been coded after collecting the data of the television programmes.
Each item is listed has its actual length of time of broadcasting. So, there is no categories in this columns.

5)- Type
Column (10) is to show which type of broadcast programme. Some of the programmes were coded according to the television administration list, while some were coded after watching and viewing these programmes. This was divided into 4 categories.
(1)- interview
(2)- comment, such as a direct speech by doctor, politician, etc.
(3)- film
(4) series

6)- Series number
Columns (11-12) are for the episode numbers of the programmes in a series. Programmes which have more than one episode or section at different times of viewing are also listed in this section. The programmes which have only one section or episode are coded (0).

7)- Daily or weekly
Column (13) is to indicate the type of broadcasting whether it is weekly or daily. This does not include repetition.

8)- Repetition
Column (14) is to indicate how many times the programme was broadcast for the second or third time.

9)- Date of repetition
Columns (15-18) are to indicate the date of repetitions, day and month.
10)- Nationality of the item.

Column (19) is to show where the programme is produced, whether locally or abroad. This section is divided into 3 categories

(1)- Saudi Arabian production
(2)- Arabic production
(3)- International production

11)- Aims

Columns (20-21) are to indicate at whom the programme was aimed. This section is divided into 7 categories.

(1)- whole population
(2)- males in the country
(3)- females in the country
(4)- youth in the country
(5)- drugs users in the country
(6)- drugs dealers in the country
(7)- parents

12)- Theme

Columns (22-23) are to indicate the main issues in the programmes. These have been coded after considerable watching of each programme, and the categories are:

(1)- trading with drugs and the consequences
(2)- social problems such as break up of families, conflict between parents and their children and so on.
(3)- kind of drugs, their names, their chemical elements
(4)- connection with murder and other crimes
(5)- more than one theme
13)- Status

Column (26) is to indicate the status of the drugs in the programme. For example in some programmes the main theme is about crime but the drugs seem to have second or maybe third consideration. This is divided into 3 categories.

(1) the main theme of the programme is drugs
(2) the programme is about something else but the second theme of the programme is drugs
(3) the theme of the programme is about something else, and the drugs are just mentioned as a minor theme

14)- Fear appeals

Column (27) is to indicate the level of the fear appeals in the programme. This is divided into 2 categories

(1) high level of fear appeals
(2) low level of fear appeals

15)- Style

Column (28) indicates the style of delivery of the programme. This is divided into 3 categories

(1) story style such as in films and series
(2) direct speech such as comment by academic or religious scholars
(3) dialogue between two people or more

16)- Source

Column (29) indicates the source of the information. It is divided into 3 categories

(1) Actors
(2)- doctors

(3)- drugs users
Appendix Five
Coding manual for the survey

1- Case number
The first four boxes from the left are case numbers.
The last box is the record number; the questionnaire is in two parts, record one is direct questions and record two is the scale. The two boxes below are for sex and regional identification.

First box for the sex and the second one is for the region.

(1) male.
(2) female.
(1) Riyadh.
(2) Jeddah.
(3) Dammam.

2- Age grouping
(1) from 12-15 years old
(2) from 16-20 years old
(3) from 21-25 years old
(4) over 25 years old

3- Father’s working status
(1) father works
(2) father does not work
(3) his father is dead

4-Father’s income
(1) from 2000-4000 Riyals
(2) from 4001-7000 Riyals
(3) from 7001- 10000 Riyals
(4) more than 10000 Riyals

5- Neighbourhood
This was an open question and coded after filling in the questionnaire; every city is
divided into areas: upper class, middle class or low class.

6- Reading newspapers
   (1) he reads newspapers
   (2) he does not read newspapers

7- Which newspaper is read
   (1) Riyadh
   (2) Madinah
   (3) Yawm
   (4) Nadwah
   (5) Okaz
   (6) Belad
   (7) Jazerah
   (8) Reiadia
   (9) None

8- Frequency of reading
   (1) always
   (2) usually
   (3) sometimes
   (4) rarely

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9- Length of reading
   (1) up to half an hour
   (2) from half an hour to one hour
   (3) from one hour to two hours
   (4) more than two hours

10- Subject of reading
    (1) politics
    (2) social issues
    (3) art
    (4) sport
    (5) readers’ letters
    (6) advertisements
    (7) Literature
    (8) all

11- reading about drugs in the newspapers?
    (1) Reads about drugs in the newspapers
    (2) Does not read about drugs in the newspapers

12- knowledge about drugs?
    (1) knows about drugs
    (2) does not know about drugs

13- Source of information about drugs. This was an open question and coded after filling in the questionnaire.
    (1) Family
    (2) mass media
(3) television
(4) newspapers
(5) radio
(6) magazine
(7) friend
(8) school
(9) clubs and posters
(10) mosque
(11) all

14- Knowledge of different types of drugs
   This was an open question and coded after filling in the questionnaire.
   (1) soft drugs
   (2) hard drugs
   All the answers were divided into hard drugs or soft drugs. Hard drugs are cocaine, heroine, hashish, LSD, morphine, and hashish oil. Soft drugs are prohibited pills, barbiturates, amphetamines, tranquillisers and kaht.

15- knowledge of campaigns about drugs?
   (1) knows
   (2) does not know

16-Family reading of newspapers
   (1) father reads newspapers
   (2) mother reads newspaper
   (3) brother reads newspapers
   (4) sister reads newspapers
   (5) others in the family read newspapers
(6) no one in the family reads newspapers

17- discussion of the drugs issue with
   (1) father
   (2) mother
   (3) brother
   (4) sister
   (5) friend
   (6) teacher
   (7) no one

18- family advice to read about drugs?
   (1) has been advised
   (2) has not been advised

19- Interest in reading about drugs
   (1) article about drugs are read
   (2) article about drugs are skimmed
   (3) articles about drugs are not read at all

20- Belief in what has been written about the drugs problem
   (1) believes it strongly
   (2) believes some of it
   (3) does not believe it at all
   (4) does not know

21- Acceptance of the presentation of the problem in the newspapers
   (1) excellent
   (2) good

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(3) bad
(4) does not know

22- Recall of mentioned drugs in the newspapers
This was an open question and was coded after filling in the questionnaire. All answers were divided into three groups.
(1) does not remember any
(2) remembers one or two only
(3) remembers three or more

23- Travel abroad
(1) has been abroad
(2) has not been abroad

24- In which country
This was an open question and coded after filling in the questionnaire. All answers were divided into four categories:
(1) an Arabic country
(2) a Western country
(3) an Eastern country
(4) all over the world

25- Use of drugs
(1) has tried drugs at some time in his life
(2) has never tried drugs

26- Current use of drugs
(1) is using drugs
(2) is not using drugs

27- Knowing somebody who has quit drug use
   (1) knows somebody who used to take drugs and has quit in this year or the year before
   (2) does not know anybody who used to use drugs and has quit this year or the year before

31- Knowing somebody who has started to use drugs recently
   (1) knows somebody who has started using drugs recently
   (2) does not know anybody who has started using drugs recently

32- Belief of the source
   (1) believes actors
   (2) believes teachers
   (3) believes policemen
   (4) believes religious leaders
   (5) believes politicians
   (6) believes physicians
   (7) believe them all
   (8) does not believe any of them
### Appendix Six

The Questionnaire in English

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Which age group do you belong to?</td>
<td>from 12 - 15</td>
</tr>
<tr>
<td></td>
<td>from 16 - 20</td>
</tr>
<tr>
<td></td>
<td>from 21 - 25</td>
</tr>
<tr>
<td></td>
<td>over 25</td>
</tr>
<tr>
<td>2  Does your father work?</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Dead</td>
</tr>
<tr>
<td>3  How much does your father earn every month?</td>
<td>from 2000-4000</td>
</tr>
<tr>
<td></td>
<td>from 4001-7000</td>
</tr>
<tr>
<td></td>
<td>from 7001-10000</td>
</tr>
<tr>
<td></td>
<td>more than 10000</td>
</tr>
<tr>
<td></td>
<td>don't know</td>
</tr>
<tr>
<td>4  In which neighbourhood do you live?</td>
<td></td>
</tr>
<tr>
<td>5  Do you read daily newspapers?</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>6  Which one do you read?</td>
<td>Madina</td>
</tr>
<tr>
<td></td>
<td>Riyadh</td>
</tr>
<tr>
<td></td>
<td>Nadwah</td>
</tr>
<tr>
<td></td>
<td>Yawm</td>
</tr>
<tr>
<td></td>
<td>Belad</td>
</tr>
<tr>
<td></td>
<td>Okaze</td>
</tr>
<tr>
<td></td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Jazerah</td>
</tr>
<tr>
<td></td>
<td>Reiaddiah</td>
</tr>
</tbody>
</table>

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7. How often do you read?
- always
- sometime
- most of the time
- rarely

8. How long do you read?
- up to 1/2 an hour
- from half to 1 hour
- from 1 - 2 hours
- more than 2 hours

9. Which subjects do you read usually?
- social issues
- politics
- sport
- arts
- advertisements
- reader letters
- literature
- all

10. Have you read about drugs in newspapers?
- no
- yes

11. Do you know about drugs?
- no
- yes

12. Which source do you use to get your information about drugs?
Please list them in the box below

13. Which drugs do you know about?
Please list them in the box below

14. Do you know that there has been a campaign and against drug abuse?
- no
- yes
15 Who else in your family read newspapers
   - Mother  
   - Father  
   - Sister  
   - Brother  
   - others  
   - nobody

16 With whom do you discuss what has been written about drugs?
   - Mother  
   - Father  
   - Sister  
   - Brother  
   - others  
   - nobody

17 Does anyone in your family advise you to read about drugs?
   - no  
   - yes

18 When you see an article about drugs what do you do?
   - skim through it  
   - read all of it  
   - don't read it at all

19 How much do you believe what has been written about drugs?
   - most of it  
   - very much  
   - don't know  
   - don't believe it

20 How much did you like the in way which the newspapers presented the campaign?
   - excellent  
   - good  
   - not very good  
   - don't know

21 Which drugs do you remember being mentioned in the newspapers?
   

22 Have you been abroad?
   - no  
   - yes
23 If yes, where? ____________________________________

24 Have you ever tried any drugs?  
no ______ yes ______

25 Do you use drugs now or consider yourself to be a drug user?  
no ______ yes ______

26 Do you know any person who used to take drugs and has quit this year?  
no ______ yes ______

27 Do you know any person who has started or tried to use drugs this year?  
no ______ yes ______

28 Which people in the media do you trust to tell you the truth about drugs?  
Teachers ______ Actors ______
Religious leaders ______ Policemen ______
Physician ______ Politicians ______
Nobody ______ All ______
Please put (○) around the suitable box opposite of each statement

1) I think taking drugs is one of families destruction.

2) Taking drugs is one of an individual economy destruction.

3) I don't mind taking drugs sometime for nice atmosphere for studying.

4) Taking drugs is harmful for health.

5) I wish that taking drugs is legal in my country.

6) Drugs increase energy, so support people should be allowed to use them.

7) Taking drugs does not cause psychological dependency.

8) Taking drugs does not cause physical dependency as newspapers say.
9) Taking drugs sometime help to solve social problems.

10) Drug dealers are not bad people as newspapers say.

11) Taking any soft kind of drug leads to use other hard one.

12) Countries who have big drug problem suffer from high rate of crime.

13) Taking drugs could damage brain those who use them.

14) I wish to take some drugs sometimes for relaxation.

15) A lady who is highly respected does not use drugs.

16) If my neighbourhood involve with drugs I wish to leave it.
17) I do not accept to marry a drug user.

18) There is no connection between taking drugs and crime.

19) I am satisfied with the Law of executing drugs smugglers.

20) Most of drug dealers are criminals.

21) Executing drug smugglers is more strict than it should be, so I wish softening it.
Appendix Seven
The Questionnaire in Arabic

1- في أي مرحلة من المراحل التالية من العمر؟
   - 20-21
   - من 12-15
   - أكبر من 21

2- هل يعمل والدك أم لا يعمل؟
   - لا يعمل
   - يعمل
   - متوفي

3- كم ريالا يستلم والدك شهرياً؟
   - من 1 إلى 7
   - من 2 إلى 4
   - أكبر من 7

4- في الاحياء تسكن؟

5- هل تقرأ الصحف اليومية السعودية؟
   - نعم
   - لا

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6 - أي الصفحات التالية تقرأ؟

المدينة □
الرياض □
الندوة □
البيوم □
المجلة □
الجزيرة □
الرياضية □

7 - كم عادة تقرأ؟

أغلب □
الباشر □
نادرًا □
أحيانًا □

8 - كم تستغرق قراءتك؟

من 3 إلى 6 ساعة □
من 1 إلى 3 ساعة □
أكثر من ساعتين □
من ساعتين إلى ساعتين □

9 - في أي المواضيع التالية تقرأ؟

شؤون سياسية □
أخبار رياضية □
رسائل القراء □
إعلانات □
كل ماذكر □

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10- من الآتي يقرأ الصحف؟

- أبوك
- أخوك
- أختك
- لاحق

11- هل تعرف عن المخدرات؟

- نعم
- لا

12- إذا نعم من أي مصدر؟

13- ما هو النوع من المخدرات الذي تعرفه؟

14- هل قرأت عن المخدرات في الصحف اليومية؟

- نعم
- لا

15- هل تعرف أنه كان هناك توعية ضد المخدرات؟

- نعم
- لا
1- Cuando encuentras un artículo en la prensa sobre drogas, ¿lo lees?
- Atrévete
- Repasa
- No leíste nada de él

2- ¿Ha habido un accidente en el extranjero?
- Sí
- No

3- Si hay accidentes en el extranjero, ¿hay algún síntoma del crimen en las noticias?
- Miembro de la familia
- Hermano
- Novio
- Amigo
- Profesor
- Ninguno

4- ¿Hay algún reportaje de drogas en la prensa?
- Sí
- No

5- En la prensa, ¿hay alguna noticia sobre drogas?
- Sí
- No

6- ¿Alguien te ha hablado de una persona que ha usado drogas en tu familia?
- Sí
- No

7- ¿Has hablado de drogas con alguien en tu familia?
- Sí
- No

8- ¿Has hablado de drogas con alguien en tu colegio?
- Sí
- No

9- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

10- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

11- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

12- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

13- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

14- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

15- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

16- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

17- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

18- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

19- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

20- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

21- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

22- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

23- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

24- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

25- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

26- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

27- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

28- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

29- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

30- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

31- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

32- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

33- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

34- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No

35- ¿Has hablado de drogas con alguien en el extranjero?
- Sí
- No
22- إلى أي مدى تتباطأ الطريق التي تعرض بها الصحف مشكلة المخدرات؟

[ ] جيدة
[ ] متارة
[ ] لا أعرف

23- إذا تتذكر أي نوع من المخدرات قد ذكرته الصحف أكتبه.

[ ] ترك

24- هل جربت أو تعاطيت المخدرات في حياتك؟

[ ] نعم
[ ] لا

25- هل تتعاطى المخدرات حالياً أو تعتبر نفسي مستخدماً مخدرات؟

[ ] نعم
[ ] لا

26- هل تعرف أي شخص كان يستخدم المخدرات في السابق ثم أقع فيها هذه السنة أو العام الماضي؟

[ ] نعم
[ ] لا
37- هل تعرف أي شخص بدأ أو حاول استخدام المخدرات هذه السنة أو العام الماضي؟

نعم □  لا □

38- من الاصناف التاليه من الكتّاب في الصحف تعتقد أنه يقول الحقيقة عن المخدرات وبحور على ثقتك؟

□ مدرس □ فنان □ ضابط شرطة □ مرتزق في الدولة □ موظف في الدولة □ اً واحد □ كل ماذكر □ طبيب □

شكرًا لتعاونكم معنا.
1- تفاوت انحرافات سبب دمار اقتصاد الفرد.

2- لايجب من تفاوت انحرافات احیانا لتحسن له للدراسة.

3- تفاوت انحرافات ضرر بالصحة.

4- افضل أن تفاوت انحرافات مسحون به نظاما في المملكة.

5- انحرافات تعطى زيادة في الطاقة لذا ارتفاع أن يسهم بها للرياضيين.

6- تفاوت انحرافات لا يسبب ادمان طبيعي.

7- سوا انحرافات لا يسبب ادمان جسمان كناقول الصحف.

8- تفاوت انحرافات سبب في تأثر المناضل الاجتماعي احیانا.
1- من الممكن أن تدمر المخدرات بعضها البعض

2- تعاطي المخدرات لا يمكن تجاهل

3- المخدرات التي على درجة عالية من الاتجاه لن تتشكل المخدرات

4- أثبتت حارتنا مكان تداول المخدرات تم تزويده منها

5- لا يوجد خطر من استخدام المخدرات

6- لن أقول إن ترويج المخدرات ليس له علاقة بأجواءه.

7- نحن مثيرين من الحكمة الذي ينص على قتل مهر المخدرات للسلالة.

8- معظم مروحي المخدرات يعتبرون مجرمين.

9- مثوبة للقتل مهر المخدرات شديدة أكثر من القتال فأفضل أن نخفف.

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18- موجي المخدرات ليس سيئين كما تكون بعض الصحف، اتفاق بشهد لا يعرف لاوافق بشهد

19- تعاطي النوع المخيف من المخدرات يؤدي إلى تناول النوع الخطير،
افظ اتفاق بشهد لا يعرف لاوافق بشهاد

20- الدول التي منها مشاكل مخدرات تعاني من ارتفاع معدل الجريمة.
افظ اتفاق بشهد لا يعرف لاوافق بشهاد

21- تعاطي المخدرات من أسباب دمار الأسرة وتشتيتها.
افظ اتفاق بشهد لا يعرف لاوافق بشهاد

شكرا لتعاونكم معاً
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