# STEREOTYPING IN ADDICTION: AN APPLICATION OF THE FISHBEIN-AJZEN THEORY TO HEROIN USING BEHAVIOUR.

Dissertation

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VOL I

by

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To my father, John Finnigan, with love.

This is to declare that this project is entirely my own work and has not been previously submitted to this or any other university.

Signed:.....

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## ABSTRACT

A review of the literature on Person Perception, as it relates to addiction, is given. Experiment 1 quantified people's subjective impressions of smokers, heavy drinkers, and heroin users, in terms of an empirically devised framework. The experiment also examined the impact of personal information (i.e a photograph) upon impression formation. It was found that, in the absence of a photogragh, heroin users were perceived as being dangerous.

A review of the literature on stereotyping was carried out. Experiment 11 examined the lower limits of stereotyping heroin users as being dangerous. This experiment was conducted within the context of Tajfel's interpersonal-intergroup continuum. The findings were that, minimal personal information coupled with dissimilarities in personal values, resulted in stereotypic perceptions of heroin users whereas, responses to a personalized presentation with similar values, were more differentiated.

The implications of stereotype beliefs about heroin users in the area of drug education is discussed. A review of the fear appeal literature is given.

Experiment 111 examined the relative

effectiveness of a fear appeal and a social appeal in influencing current heroin users' attitudes and intentions with regards to using heroin. This examination was systematically investigated within the context of Fishbein and Ajzen's theory of reasoned action and their model of persuasive communication.

It was found that, (i) heroin use is under attitudinal control, (ii) current heroin users hold a health belief structure and a social belief structure associated with the consequences of using heroin, and (iii) both the fear appeal and the social appeal had an effect on attitudes and intentions with regard to heroin use.

Experiments IV and V examined the lay public and ex-heroin users' opinions regarding the relative effectiveness of emphasising health factors or social factors in attempts to influence heroin taking decisions. The findings revealed there to be a disagreement between the two groups. The lay public were of the firm opinion that emphasis should be placed on health factors. On the other hand, ex-heroin users regarded social factors as being more influential.

The wider implications of these findings, in terms of drug evaluation studies, are highlighted.

# CHAPTER ONE

# 1. STEREOTYPING

## 1.1. Introduction

When we observe people in everyday life we invariably possess prior information (of varying quality) about the social groups to which they belong. This information takes the form of categorization, prototypes or stereotypes (Tajfel, 1981). Many studies have demonstrated that our judgements about others and of their behaviour are often biased (cf Kahneman, Slovic, and Tversky, 1982) and a number of researchers have suggested how these biases might arise (cf Nisbet and Borgida, 1980).

People use stereotypes to predict how others will behave and this can affect their behaviour towards others. The major function of attaching labels to different groups in society is to impose order on a chaotic social environment. We use categorical labels to divide the social world into intelligible units. The division is accomplished by learning or creating criteria for defining group membership. The criteria used are potentially as infinite as the differences among people, but in practice, some criteria are more easily applied than others. This facilitates the process of organizing and classifying our positions

with respect to other people.

In addition to being the defining features of group membership, group labels are associated with a second set of features consisting of personality traits. It is these traits that people commonly think of as stereotypes. The characteristic features of a given group are not random. They arise from the nature of the historical contact between different groups, the actual cultural traits possessed by both groups, and the psychological consequences.

Prediction is important for social interaction. Social interaction is premised on assumptions and expectations each individual brings to the social context. These assumptions often include a shared system of cultural norms relating to the conduct of interactions. Without making these basic assumptions interactions would be impossible. These assumptions set up a broad, but sometimes, rather ill-informed set of expectations for how the other party will respond to the interaction. In addition to these basic assumptions, the situational context provides information concerning appropriate normative conduct. Combined with implicit assumptions that are made, these situational cues serve to increase our understanding about how to behave.

Nonetheless, in social interactions substantial uncertainty remains. It is to further reduce this

uncertainty that stereotypes are so readily called into play in social settings. The presumed chatacteristic features of a stereotyped group provide us with information about how others will behave towards us and how we should behave toward them. Ordinarily, we acquire information about particular others through our experiences with them. These experiences help us to determine the extent of similarity in our meaning systems and to make inferences about the attributes they possess. For people using them, stereotypes seem to provide a shortcut to this knowledge. The advantage of stereotypes is that they allow people to believe that they have a basis for interaction; the disadvantage is that they may be wrong. Stereotyping is not necessarily an intentional act of abusiveness; however, it can blind us to individual differences within a class of people and because of this, it can be maladaptive and potentially dangerous. It can result in biases and discrimination against certain groups in society.

## 1.2. Stereotyping in Addiction

Surprisingly, the concept of stereotyping, which has long been important in social psychology, has until recently not often been employed in the analysis

of addiction. Studies have tended to concentrate on how the professional perceives the 'addict' (e.g. Romney and Bynner, 1972), how the 'addict' perceives him/herself (e.g. Hoy, 1977), and how the 'addict' perceives his/her addiction (e.g. Gossop, Eiser, and Ward, 1982).

Researchers have presumably suspected that the public has distorted perceptions of the 'addict' and at times, have documented the misleading information about 'addicts' disseminated by the mass media. Psychologists studying drug addiction, as well as other forms of deviation, have also recognised the tendency for a 'mythology' of problematic behaviour to develop (e.g. Gossop, 1982). Yet mechanisms of stereotyping have somehow never been viewed as related to explanations of addiciton.

Evidence from Sociological Labelling Theory suggests that some attributed stereotypes, e.g. 'alcoholic', are highly salient categorizations influencing both the perception and the behaviour of the stereotyped groups and society's reaction towards the individual members of that group (Scheffe, 1966; Scott, 1973).

The dangers of sociological labels have been extensively studied in the area of deviant behaviours. Even though chronic alcohol use and opiate use are victimless behaviours, there is evidence to suggest

that they are regarded by many as deviant behaviours. For example, 'alcoholics' and 'drug addicts' were two of the most frequently mentioned deviant types in one community survey where respondents were asked to list those things or types of persons whom they regarded as deviant (Simmons, 1965).

The main consequences of the social labelling processes in the area of addiction can perhaps be best highlighted by referring to the medico-disease concept of alcoholism. Much effort in recent years has been directed toward educating the lay public that alcoholism was a medical problem rather than a criminal offence (Jellineck, 1960). These efforts are reflected in the various publications for Public Health Services and the National Council on Alcoholism. Likewise, as the theraputic effectiveness of Alcoholics Anonymous has become increasingly visible, the public has become aware of the assumption that a form of physiological allergy leads to alcoholism. The A.A. concept is somewhat different from the traditional medical model, but the two conceptions share a strong tendency to reduce individual responsibility for the genesis of alcoholism.

The effects of this re-definition have been regarded, by many, as positive, the most prominent impact being that alcoholics are committed to

hospitals, clinics, etc., for treatment rather than being detained in prisons. Medical treatment is the natural corollary of the medical model and is aimed towards 'recovery' rather than toward the 'character reform' goal of incarceration. In any event, medical treatment is regarded as a more humane reaction to a form of behaviour that may not be anti-social or criminal.

## 1.3. Mechanisms Operating Through the Social Labelling Processes Which are Based on the Medico-Disease Concept of Drinking

There are two basic mechanisms operating through the labelling process which is based on the disease model of drinking. The first mechanism is assignment to the 'sick role', this being the consequence of the drinker being labelled as manifesting an illness. The 'sick role' assignment may legitimize problem drinking patterns since these patterns have been labelled results of pathology rather than as inappropriate behaviour. This is due to the fact that one of the main characteristics of the 'sick role' is that the individual is not held responsible for his illness; thus, in this case the illness is abnormal drinking behaviour and assignment to the 'sick role' removes the individual's responsibility for engaging in the behaviour.

It could be argued that there is a significant

parallel between the development of the disease model of alcoholism and the disease model of hysteria, the latter of which developed during the 19th century as an early step in a significant expansion of the aegis of psychiatry and medicine. Szasz (1961) points out that prior to the labelling of hysteria as a legitimate disease, such behaviour was regarded as malingering and was met with social sanctions. The 'recognition' of hysteria as a mental disorder changed the picture considerably, the implication being that the legitimization of malingering through labelling it a 'real' disease may have led to more people 'choosing' this behavioural alternative.

A second mechanism which operates through the disease model which may serve to reinforce problem drinking is that the labelling process may lead to a secondary problem through a change in the problem drinker's self concept as well as a change in the image or social definition of him/her by the significant others in his/her social life (Scheffe, 1966). The individual with the medical diagnosis of 'alcoholic' occupies a social position which has accompaning role expectations, the principle expectation being engagement in deviant drinking patterns. This is illustrated by the fact that we are not surprised to see a drunk alcoholic and we marvel with amazement when we see a sober one. The end result of the labelling process is a structure of role

expectations and a set of self concept changes that eventuates in the individual's performance of the deviant drinker role. The behaviour which is assigned is carried out.

## 1.4. The Consequences of Social Labelling

The 'reaction from society' perspective has provided a shift from the study of individuals and their characteristics to the definitional and reactive processes surrounding deviant acts and actions. The role of stereotypes in the identification of responses to deviant behaviour and individuals has consistently been stressed by advocates of this approach (e.g. Boris, 1979; Schlur, 1971). Stereotypic expectations are believed to influence both the attribution of the deviant label and reactions to or consequences of that label. It has been suggested that the attribution of deviance may be made in accordance with more general expectations (e.g. Norland and Shover, 1977). For example, Harris (1977) proposed that 'actors come to assign themselves and others to limited classes of behaviour according to their social 'type'. Such expectancies - which specify broad behavioural sequences as well as type-to-role linkages - are referred to here as type scripts.....such background expectancies align particular sets of actor types with particular sets of social roles.....type-scripts also are seen as aligning types of actors with possible classes of deviant behaviour and identities'.

(Harris, 1977, pp 11-12).

The application of particular deviant typologies to particular actors is basically a situational matter (Kitsue, 1962). However, several theorists have argued that the nature and availability of these social categorizations can be linked to broader ideological stocks of knowledge which transcend specific situations (Stoll, 1968). Ideologies of deviance, which may vary across time and social space, define the reality of certain types, (e.g. Salem witches) as well as their content, (e.g. 'the dirty skid row alcoholic' versus the 'sick alcoholic'). Kai Erikson, for example, points out that 'each society is exercising a cultural opinion which develops a characteristic way of looking at deviant behaviour.....(The) way in which this option is exercised has a profound effect both on the forms of dividing a social experience and on the kinds of people who come to exhibit it.' (Erikson, 1966, 161).

This approach also implies that deviant types function as social constructs which mediate between the ideological and situational levels of reaction to deviance by organizing the perception, interpretation and treatment of deviant actors.

In addition to influencing classes of behaviours according to their social types, e.g. 'a sick

alcoholic' social labelling can also influence the attitudes of those who have been labelled which can, in turn, influence their behaviour. In the past it has been empirically demonstrated that a person's own drinking behaviour can be expected to reflect his/her attitudes towards alcoholism, e.g. M¿Hugh, Beckman, and Frieze, (1980); Furnham and Lowick, (1984); Davies, (1979); Davies and Stacey, (1972); Jahoda and Cramond, (1972); Bynner, (1969).

With the increasing awareness and concern about addiction and its associated problems, the public's attitudes towards those with addiction problems are important. They are important because negative attitudes constitute a major impediment to improving support for those who are experiencing addiction problems. It may be the case that, rather than impeding support for those with addiction problems, the lay public have potential ability for helping such groups. For example, a study by Doctor and Sieving (1973) found that friends, family, and ministers were rated extremely highly in terms of helpfulness for those kicking a drugs habit. The implication from this study is that the role of the non-professional in treatment of addiction has much to offer. This support could be aided and enhanced from information programmes and community based projects designed to teach supporting skills and how to apply them.

Before such a project could ever be considered,

an assessment of the public's reaction to those with addicition problems is necessary. Experiemnt 1 is a hypothesis-generating experiment designed to identify the lay public's perception of those labelled 'a smoker', 'an alcoholic', and 'a heroin addict'.

Before embarking on this study it would be helpful to outline some theories of the origins and functions of stereotypes and stereotyping as it relates to society as a whole.

# CHAPTER 2

# 2. AN ANALYSIS OF THE ORIGINS AND FUNCTIONS OF STEREOTYPES

## 2.1 Introductory Remarks

Stereotyping has been one of the most provocative and explored phenomena in social psychology. Generally, the study of stereotyping has focused on impressions of ethnic and racial groups and virtually every prominent theory in psychology has tackled the issue at some time or another.

Traditional conceptions of stereotypes have given little attention to the possible cognitive biases that may produce differential perceptions of majority or minority groups. According to the traditional viewpoint, three specific assumptions are commonly made regarding the basis of stereotyping. Firstly, it is frequently argued that stereotypes develop and are used to serve the motivational needs of the perceiver. For example, perceiving a minority group as being inferior may enhance (or at least protect) the perceiver's self esteem. A related view is that stereotypes serve the function of rationalizing one's preference against an outgroup. The scapegoat theory of prejudice is another branch of this emphasis on motivational needs underlying the discriminatory

perception of minority groups. Secondly, there is the belief that stereotypes are arrived at through 'faulty reasoning processes' (e.g. Lipperman, 1922). It is argued that when a person is confronted with some group other than his/her own, normal cognitive functioning is short-circuited and judgements are made as the result of illogical thinking. The third common assumption is the 'grain of truth' hypothesis (Campbell, 1967). According to this explanation, stereotypes arise from direct experience with the stereotyped group.

## 2.2. Differential Perception of Majority and Minority Groups as a Function of Cognitive Processes

In a departure from the traditional view, Allport and Kramer (1945) proposed that stereotyping may be intrinsic to the cognitive system. That is, people oversimplify their experiences by selectively attending to certain features of the information within the environment and by forming categories, concepts, and generalizations to deal with vast quantities of available data.

In 1954, Allport reiterated his view about the role of categorization in our perception of everyday objects. 'The human mind must think with the aid of categories (the term is equivalent here to generalizations). Once formed, categories are the

basis of normal pre-judgement. We cannot possibly avoid this process. Orderly living depends on it'.

Allport states that the process of categorization has five important characteristics:-

1. It forms large classes and clusters, for guiding our daily judgement.

2. Categorization assimilates as much as it can to the cluster.

3. The category enables us quickly to identify a related object.

4. The category saturates all that it contains with the same ideational and emotional flavour.

5. Categories may be more or less rational.

(Allport, 1954, pp 19-21)

Allport proposes that these processes apply to the perception and categorization of people as well as objects and that by evolving socially meaningful categories in which to place people, the social perceiver deals with an overload of information about people in the same oversimplified fashion as is used to deal with objects.

Despite this insight into the cognitive aspects of stereotyping, many researchers failed to follow this lead and the assumption that stereotyping 'short-circuited' the normal reasoning processes continued to guide much of the research. Exceptions are the work by Tajfel, Billig, and their colleagues, (e.g. Billig,

1973; Billig and Tajfel, 1973; Tajfel and Billig, 1974), and by Allen and Wilder, 1975).

The definition of the categorization process offered by Tajfel is the process of ordering the environment in terms of categories i.e. through grouping objects, events and people as being similar or equivalent to one another in their relevance to an individual's actions, intentions or attitudes. Categorization is a basic human characteristic. We categorize information partly as a reflection of the fact that objects in the natural world themselves display coherent and non-random patterning of features: they form natural object categories (Rosch, Mervis, Gray, Johnson, Boyes-Bream, 1975).

Like Allport, Tajfel argues that there is no reason to assume that forming generalizations about minority groups is any different from forming generalizations about other objects or events. The definition of stereotyping offered by Tajfel (1969, pp 423) 'is the general inclination to place a person into categories according to some easily and quickly identifiable characteristic such as age, sex, ethnic membership, nationality or occupation and then to attribute to him qualities believed to be typical of members of that category'. Stereotyping thus begins with differential perception of social groups.

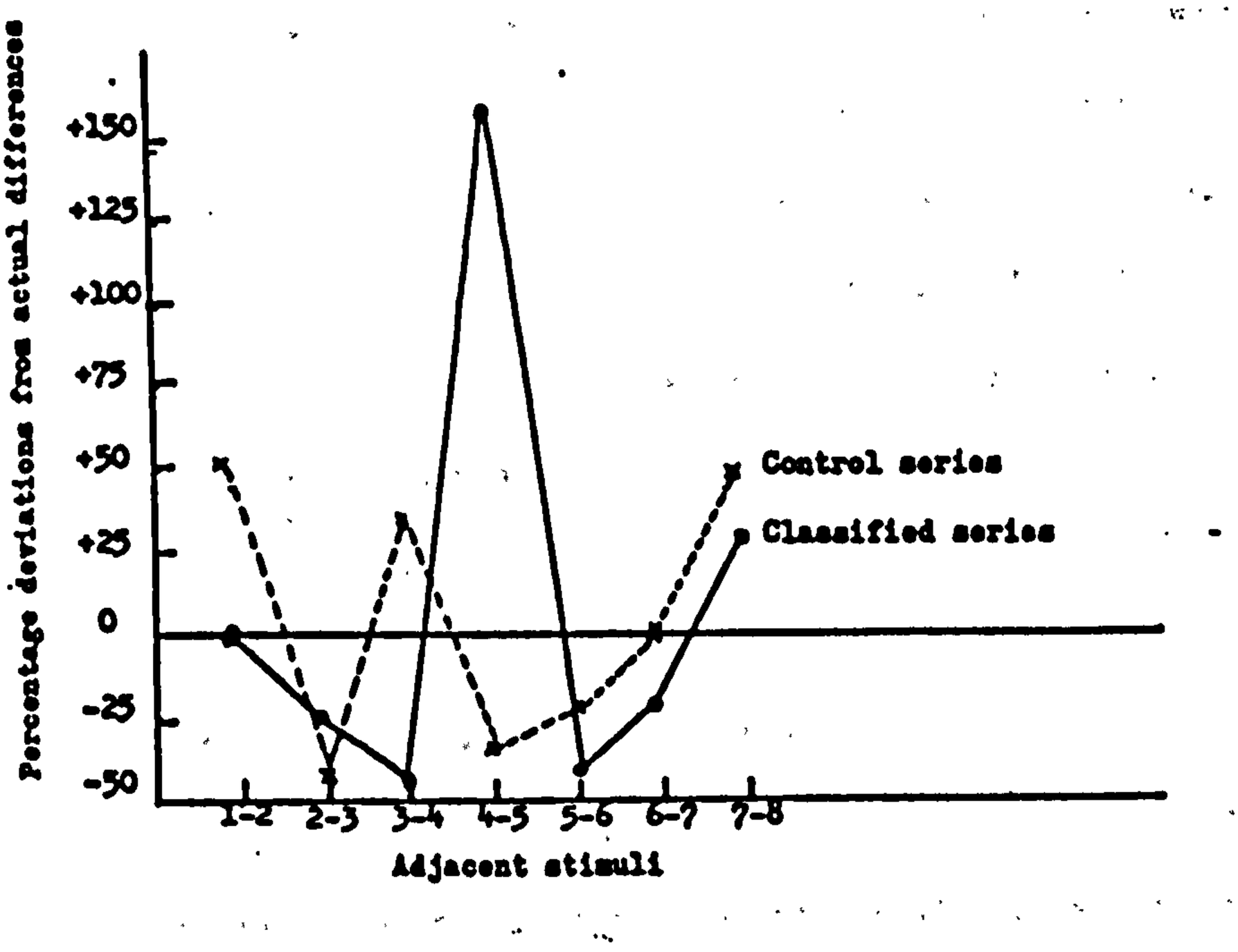
If a perceiver differentially evaluates two groups - either two groups which he is not part of, or his/her own group versus some other group, then the particular content of those evaluations provides the basis for stereotypic conceptions. Several lines of research indicate that this kind of differential perception of groups can occur simply as a consequence of our normal cognitive functioning. If this is the case, then it may be inappropriate to assume that stereotyping necessarily involves faulty reasoning or unconscious motivation or even some kernal of truth on which a stereotype is based.

In recent years there has been a remarkable growth of interest in the cognitive processes involved in the way persons perceive and make judgements about others. The number of ways in which people are perceived as differing is enormous and, with the possible exception of sex, each of these individual differences varies along a continuous dimension. Transforming gradual and continuous variations into clear cut categories makes life easier for us. It simplifies a tremendous amount of information and, for most everyday uses, such gross distinctions may suffice. The danger is that, once we have classified two people or two groups into different categories, we may exaggerate the differences between them and ignore the similarities or, conversely, once we have classified two people or two groups into the same category, we may exaggerate their similarities and

ignore their differences. Some evidence that these are real and present dangers comes from the work of Tajfel.

As a preliminary demonstration of these effects Tajfel and Wilkes (1963) asked subjects to make judgements of lengths of lines, each line being presented on a separate cardboard background to subjects seated several feet away. The eight lines presented varied in length from 16.2 centimetres to 22.9 centimetres, and all subjects were asked to make their judgements in centimetres. Some subjects simply made the judgements a number of times. However, for other subjects, the cardboard sheet on which the four shorter lines were printed each had a large letter A drawn on them, and the sheets on which the four longer lines were presented each had a large B on them. Thus, the letters A and B provided a classification of the lines into two groups (shorter and longer), even though the lines within each group still differed in length. One of the more dramatic results from this experiment are presented in Figure 1 (from Tajfel and Wlikes 1963) As may be seen from the figure, the superimposed classification (A versus B) that enabled subjects to divide the lines into two groups led them to exaggerate the differences between the two classes -or, more precisely, to exaggerate the differences of the largest line in the 'short class' and the shortest line in the 'long' class.

Figure 1




**Actual and apparent differences between stimuli after one double length session.**

Tajfel (1962) described this phenomenon as deductive categorization (as opposed to inductive categorization). This consists of drawing inferences about the nature of an object or event on the properties of a category. Applying this to the line experiment, when the allocation of stimuli to different categories is known, they will be judged as more different, as far as the characteristics of the line are concerned, than when the basis for allocation of the stimulus is not known. Similar results using different types of stimuli, for example, lines and squares, were obtained in other experiments (e.g. Campbell, 1956; Davidson, 1962; Lilli, 1970 (cited in Forgas, 1981). Some experiments have used 'social stimuli' such as attitude statements (e.g. Eiser, 1979).

While the Tajfel and Wilkes study provides some evidence that the classification of stimuli into categories leads to an exaggeration of intercategory differences there was, in fact, little evidence in the study for minimization of intracategory differences. Tajfel, Sheikh, and Gardner (1964) attempted to find some evidence for the latter by having Canadian College students question two Canadian and two Indian persons about their views on books and films. Afterwards, subjects made a series of descriptive ratings of the persons questioned. The set of ratings included attributes reflecting both the Canadian and the Indian stereotypes. Results showed that two

members of the same nationality were rated similarily on those attributes associated with the stereotype of that national group.

More recently, Taylor, Fiske, Etcoff, and Ruderman (1978) reported an experiment which demonstrates minimization of intracategory differences. In this experiment subjects listened to a tape of a discussion among six persons, three of whom were black and three of whom were white. The authors reported that, after hearing the group discussion, subjects were able to remember the race of the person who made almost every comment but they could not recall which of the blacks or which of the whites had made the remark. Subjects apparently were successful at differentiating between two groups but had difficulty differentiating among the various members.

There exists now a considerable number of studies showing that intergroup differentiation varies in its extent in accordance with the category differential model. Similarily, there is a large body of evidence concerning the second aspect of categorization, which consists of accentuating similarities between members of the same category i.e. that category differentiation is associated with accentuation of intracategory similarities (e.g. Diose, 1978).

The above findings would seem to have important implications for the process of stereotyping. Obviously, categorization of stimulus objects into groups is not only a useful process for simplifying a complex world, but it is also quite adaptive in many circumstances. However, social objects can be classified in numerous ways depending on the particular criteria employed. Any given way of classifying others into groups should be of some utility to the perceiver, for example, in helping him/her make inferences and judgements about others or in anticipating the nature of an interaction with them. Conversely, a categorization system that was not useful in these ways would presumably be disregarded in favour of some alternative means of cognitively defining important group memberships. The findings described above suggest that the categorization process itself produces perceptual distortions which justify for the perciever the use of the categories employed. That is, the resulting enhancement of perceived intergroup differences can make those categories seem all the more meaningful and so can provide the perciever with subjective 'evidence' that this particular way of defining social groups has identified important differences to which he ought to attend.

## 2.3 Differential Perceptions of Groups Based on Illusory Correlation

The work by Chapman (1967) and Hamilton and his colleagues (Hamilton and Gilford, 1976) draw attention to some cognitive aspects of social stereotyping. Several years ago, Chapman (1967) introduced the term 'illusory correlation' to refer to the erroneous report by an observer regarding the degree of association between two variables or classes of events. Chapman's interest was in clinical diagnoses, and in an interesting series of experiments the Chapmans (Chapman and Chapman, 1967; 1969) and others (e.g., Golding and Rorer, 1972; Starr and Katkin, 1969) have provided evidence of how cognitive biases can result in erroneous beliefs regarding the relationships between various psycho-diagnostic signs and patient symptomatology. Hamilton's interest was in person perception, more specifically, whether the foundation for stereotyping could be based on the cognitive biases described in Chapman's research.

The experimental paradigm used by Hamilton and his colleagues (1976) was based based on Chapman's (1967) original demonstration of illusory correlation. In that experiment, Chapman constructed two lists of words, such as the following:

List A: lion, bacon, blossoms, boat

List B: tigers, eggs, notebook

Subjects in the experiment were shown a series of word pairs, each pair combining a word from List A with one from List B. All possible pairings occurred in the

sequence an equal number of times. Subjects were then asked to estimate, for each word on list A, the percentage of the occurrences of that word in which it had been paired with each of the List B words. Because all possible pairs had occurred the same number of times, the correct answer in each case was 33.3%. Chapman found, however, that systematic biases were associated with certain kinds of words. In those cases where there was a strong associative relationship between two words (e.g. lion-tiger, bacon-eggs) subjects consistently overestimated the frequency of occurrence of the word pair within the series. The other case for which subjects consistently over-estimated the frequency of occurrence was when the two words paired were distinctive within their respective lists. In each list, one word was considerably longer than the other words. When those two were words paired (blossoms-notebook in the above example) subjects recalled the pair as having occurred more frequently than it actally had. Therefore, Chapman argued, an illusory correlation may be based either on the associative meaning that exists between two events or on the pairing of distinctive events. In either case the subject 'sees' the two events as 'going together' with more regularity than has been actually true.

Hamilton and his colleagues explored the implications of Chapman's findings for social stereotyping. In this context, the associative basis

for illusory correlations demonstrated in Chapman's study corresponds to the consequences of learned stereotypic conceptions about social groups. That is, if one has previously learned that blacks are more likely than whites to be lazy and dishonest, then Chapman's results suggest that the person's perceptions of events would be biased in that direction, even in the absence of any difference between blacks and whites in the extent to which laziness or dishonesty are manifested in their behaviour. The result for the perceiver, then, is a self-fulfilling prophesy in which 'blackness' is seen as being related to laziness and dishonesty, even though no such relationship may exist in the material to which the person has been exposed.

Hamilton et. al's. (1976) research has focused on the other basis for establishing an illusory correlation, the pairing of events that are distinctive. This interest grew out of a parallel which these researchers saw in contemporary American life. They argue that in the everyday experience of the typical white person, interaction with and even exposure to blacks is a relatively infrequent occurrence, so that when one does encounter a black person it is a distinctive event, distinctiveness in the case being defined by infrequency. In addition, undesirable or non-normative behaviour is less frequent than desirable behaviour and hence can also

be considered distinctive. If this is true, then the implication of Chapman's (1967) finding is that the pairing of 'blackness' with 'undesirable behaviour' can lead the typical white observer to infer a relationship between the two, even if the distribution of desirable and undesirable behaviours has been the same for both blacks an whites. Such an inference would provide the basis for the differential perception of the majority and minority groups, and hence for stereotyping.

In an experiment designed to test this line of reasoning (Hamilton and Gifford, 1976) subjects were shown a series of 39 slides, each of which presented one statement describing a person as having performed some behaviour. Each stimulus person was described as belonging to one of two groups. Because they were interested in the effects of paired distinctiveness and not in any associative bases for the subject's judgements, actual social or ethnic groups were not used; consequently each person was merely identified as belonging to either Group A or Group B. The stimulus sentences were of the following form: 'John, a member of Group A, canvassed his neighbourhood soliciting for a charity', 'Bob, a member of Group B, lost his temper and hit a neighbour he was arguing with'. In the set of stimulus sentences used, there were twice as many statements describing members of Group A than there were for Group B, and desirable behaviours were more frequent than undesirable

behaviours. However, the ratio of desirable and undesirable behaviours was identical for both groups. Therefore, there was no relationship between group membership and the desirability of the behaviours described. In addition, the sentence sets were constructed so that the average desirability values of the behaviours characterizing the two groups were approximately equal, based on previously obtained ratings of a larger set of behaviours.

Within the stimulus materials presented to the subjects, membership in Group B and undesirable behaviours were distinctive characteristics. Therefore, sentences describing members of Group B performing undesirable behaviours represented instances of the pairing of distinctive (infrequent) events. Based on Chapman's (1967) findings, these researchers expected an illusory correlation to occur such that the subjects would overestimate the degree of association between membership in Group B and the incidence of undesirable behaviour. If so, then this might result in differential perception of the two groups, similar to that observed in stereotyping.

Following the presentation of the stimulus sentences, subjects were given a booklet in which they were asked to perform several judgement tasks. In one part, the behaviour descriptions from the stimulus sentences were reproduced and subjects were asked to

indicate for each one whether it had been performed by a member of Group A or Group B. (See Hamilton and Gifford, 1976 for details of the analyses carried out on the data from this this experiment).

In sum, the results from this study demonstrated that distortion in both recall and judgement processes can result from the way in which information about occurring events is processed. The consequence was that two stimulus groups were perceived a being different from each other, even though there were no informational basis for the perceived difference. Subjects significantly overestimated the number of undesirable characteristics that had been attributed to the smaller group.

Much of the argument and the studies discussed in the above section referred to a general cognitive process of categorization which can briefly be restated as follows: once an array of stimuli in the environment has been systematized or ordered through categorization on the basis of some criterion, this ordering will have certain predictable effects on the judgements of the stimuli. These effects consist of shifts in perceived relationships between the stimuli; these shifts depend upon the class membership and the relative salience of the stimuli in the total array. The resulting polarization of judgement, and cognitive 'weight' given to some of the stimuli serve as guidelines for introducing subjective order and

predictability into what would otherwise be a fairly chaotic environment.

## 2.4. The Role of Values in Social Categorization

The above discussion is concerned with non-social categorization and non-social stereotypes. But this is not enough when one is concerned with social categorizations and social stereotypes. Many of the categorizations applying to objects in the physical environment are neutral, in the sense that they are not associated with preferences for one category, with one category being 'bad' and another 'good', or one being 'better' than another. When, however, this does happen in the physical environment, certain clear-cut effects appear which distinguish between neutral and 'value-loaded' classifications. There are clear cut differences between cognitive processes manifested in the shifts of judgements applying to neutral and to social value differentials. Perhaps the most important difference between judgements applying to physical stimuli and to social stimuli is that social categorization is often value-based and normative. For example, division of people into social categories which matter to the individual is usually associated with positive and negative evaluations of these categories. These value differentials tend to enhance still further (as compared with neutral categorizing)

the subjective differences on certain divisions between the categories and the subjective similarities within categories (e.g. Doise, 1978).

## 2.5. The Role of Values in the Area of Addiction

The consequences of social value differentials operating in the area of addiction can perhaps be highlighted by returning again to the medico-disease concept of alcoholism. Apart from reinforcing the problem behaviour by labelling it as sick, (see chapter 1), there are two other possible consequences of labelling which may occur and further solidify deviant drinking patterns.

The first is rejection of the individual by certain groups as a result of the label, as distinct from intolerance of his/her drinking behaviour. The 'alcoholic' thus seeks out opportunities to affiliate with more tolerant drinking groups, (evidence for the occurrence of this with young adolescent drinkers has been found by Downs (1987). The changes in self-concept that result from labelling may also tend to lead the individual to groups composed of other 'deviant drinkers.' This differential association serves to further legitimize, reinforce, and perpetuate deviant drinking and lead further towards a true drinking habit.

A second consequence of labelling may be the

integration of the labelled individual into social groups which are composed primarily of non-deviants. It is possible for the group to do its own labelling of a selected 'deviant,' but the labelling will be much more effective if it is executed by an outsider who has the institutionalized assignment to label and whose authority is not questioned. The function served by the 'deviant's' presence include, (1) the definition of other group members as 'normal' because they do not share the 'deviant's' symptoms in his label, (2) the presence of a submissive and relatively helpless target for scapegoating which, in turn, allows for displacement of inter-member tension onto the weaker 'deviant' member and thereby reduces cross-cutting interpersonal conflict which could weaken the organization of the group, and (3) the presence of a rule breaker may offer the group a ready excuse for its shortcomings in goal attainment activities.

These functions serve to lock the 'deviant' member's role behaviour into the group pattern to the extent that his/her behaviour is selectively rewarded and attempts by outsiders to change the behaviour are strongly resisted.

The basic point is that the mere process of stereotyping (labelling) may serve to aggravate and perpetuate a condition which is initially under the control of the individual.

## 2.6. Values and Cognition

Many studies in perception have adequately demonstrated that perception is not veridical and the role of values in perceptual and cognitive processes has been well recognised for several decades. The classic experiment of Bruner and Goodman (1947) found that children tended to accentuate the size of valued objects (i.e. coins) and that this tendency was especially pronounced among children with a 'poor' background. These findings illustrate the general principle that perception must be understood as an active interaction between the human organism and its environment and that therefore, 'values and needs' intervene in the process. The literature concerning the relationship between perceptual processes and value relevance is very extensive (Allport, 1954; Bruner, 1958; Secord and Backman, 1964). In 1953, Bruner and Rodrigues drew attention to the possibility that what appeared to be a simple 'over-estimation' may have been in fact a relative increase in the perceived subjective differences between stimuli (such as coins). Tajfel (1957) developed and elaborated this notion a few years later and was confirmed in a number of subsequent experiments. The major implication was that the increased accentuation of judged differences may also apply to social categorizations of people into differing groups (cf Doise, 1978; Eiser and Stroebe, 1972; Tajfel, 1959;

1963).

Just as judged differences in size between individual items in a series of coins tend to be larger than the corresponding differences in a neutral series of stimuli (Tajfel, 1957), so the judged differences on certain dimensions correlated with the classifications tend to be larger in the case of social categorizations related to value differential than they are in neutral categorizations (Tajfel, 1959). This hypothesis has been tested by comparing ratings by two groups of subjects of the personal attributes of people belonging (or assigned) to different social categories. One group of subjects was previously ascertained as being prejudiced against one of the two categories whilst the other group was not. The underlying assumption was that the categorization presents a stronger value differential for the former than for the latter group. Results usually showed that the prejudiced group judged the differences on certain dimensions between the members of the two categories to be larger than the non-prejudiced group.

## 2.7. The Role of Values in the Preservation of Social Categories

Values also clearly affect the kind of mistakes that an individual is prepared to permit in his/her

identification of social category membership. Bruner, Goodnow, and Austin (1956) detail the conditions in which individuals will commit errors of overinclusion or overexclusion in their assignments of ambiguous items into one of two categories which are available for such assignments. The first of these errors consists of including into a category an item which, on a specified criterion, does not belong to it; the second, of excluding an item which does belong to it. The greater the difference in value between the social categories, the more likely it is that errors of assignment into a negatively valued category will be more in the direction of overinclusion, and errors of assignment into a positively valued category will be in the direction of overexclusion.

In their analysis, Bruner et. al. (1956) related the frequencies of the types of errors to their perceived consequences, that is, to the weighing up of the respective risks entailed by making one or other kind of mistake. This analysis of risk can be extended to the subjective consequences of mis-identifying the group membership of an individual when the social category to which they belong is related to a strong value differential for the person making the assingnment. The risks are that a 'bad' person could be assigned to a 'good' category, or a 'good' person in a 'bad' one. If this happens too often it could threaten or even invalidate the value differential. From the evidence we have, there seems

to be a preference for not having the wrong person in a valued group, over the risk of having the right person out of it. The case of over-inclusion into negatively valued categories is also well represented in a group of studies on the recogniton of Jews by antisemites and non-antisemites, (cf Tajlef, 1969, for a detailed review of these studies). The prejudiced subjects showed greater accuracy in recognising Jews. This was due to a response bias; they labelled a relatively larger number of photographs as Jewish since the categorization had a greater value-loading for them than for the non-antisemites.

An interesting experiment conducted by Pettigrew, Allport, and Barnett (1958) in South Africa, resulted in similar findings. Afrikaner subjects tended to assign ambigious faces to the extremes of 'Europeans' and 'African' with a less frequent identification as 'Coloured' or 'Indian'. Lent (1970) repeated the study in Texas using Whites, Mexicans, light-skinned Negroes, and dark-skinned Negroes. Although he failed to replicate many of the findings, he did report that there was a difference between various groups of White subjects.

Value differentials guide the use made of ambigious information. In the case of accentuation of differences and similarities, the maintenance of a system of social categories acquires an importance

which goes beyond the simple functioning of ordering and systematizing the environment. It represents a powerful protection for the existing system of social values, and any mistakes made are made to the extent that they do not endanger the system.

## 2.8. Social Categorization and Social Identity

A second important aspect of social categorization is the concept of social identity. Tajfel (1978a) defined social identity as 'that part of an individual's self concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership'. Tajfel admits that this definition of social identity is limited and there is no doubt that the image an individual has of him/herself is infinitely more complex. The assumption made, however, is that no matter how rich and complex the individual's view of him/herself in relation to the surrounding world, some aspects of that view are contributed, in particular, by the differentiation which exists between his/her own group and others.

Seen from this intergroup perspective of social identity, social categorization can therefore be considered as a system of orientation which helps to

create the individual's place in society (cf Berger and Luckman, 1967). It is this comparative perspective which links social categorization with social identity. On the basis of extensive experiments, social comparison processes play a very important role in linking group discrimination with the creation and maintenance of positive or negative social identities (Tajfel and Turner, 1979, Tajfel, 1979).

A social group will, be capable of preserving its contribution to an individual's society only if it manages to keep its positively valued distinctiveness from other groups. This establishment of distinctiveness through attributing positive characteristics to one's own group in comparison with other groups is particularily salient in cases of discrimination against minority groups.

Many such cases have to do with attempting to establish a positively valued identity by underprivileged groups. The hammering out by American Blacks of a group distincitveness in which they can feel pride is a case in point. Another example can be found in the attempts to establish a new and distinctive national identity in many new nations.

Although the growing body of findings emphasises

the importance of cognitive processes as determinants of the differential perception of social groups, it is not suggested that that all stereotypes are based solely on such factors. Much of what a person believes and feels about stereotyped groups is acquired through social learning experiences; and motivational factors may facilitate the acquisition and/or maintenance of the prevailing conception of various outgroups. Even when these other processes play an important role, however, their ultimate effects are necessarily mediated by their influences on the perceiver's cognitive processes.

## 2.9. Conclusions on Stereotyping

Considering the three widely held assumptions about stereotypes: that they (a) serve the motivational needs of the perceiver, (b) that they are based on some 'kernel of truth', (c) that they are the product of 'faulty reasoning processes', it is instructive to reconsider these assumptions in the light of the findings to date. Certainly the results of the above mentioned studies cannot be understood in terms of motivational forces operating in the perciever. Most of the tasks employed were highly cognitive in nature, and in most cases, deliberate efforts were made to avoid any influences caused by previously developed associations or values the subjects might have regarding certain social groups. Motivational theories would have a particular

difficulty accounting for the results of the illusory correlation studies (Hamilton and Gifford, 1976).

Similarily, it is difficult to identify any 'kernel of truth' that might underlie the differential perceptions and intergroup discrimination evidenced in these studies. In the 'minimal group situation', (research by Tajfel and the others), the group assignments were made on the basis of criteria quite irrelevant to the intergroup judgement.

The third assumption about stereotyping is that it reflects a faulty or inferior reasoning process. This viewpoint holds that the cognitive processes involved in stereotyping are qualitatively different from our characteristic manner of thinking and perceiving. There appears to be no solid evidence for such a short-circuiting process and the studies summarized above indicate that such an assumption is not necessary. Several characteristics of our normal cognitive processing have been cited that have been sufficient to produce differential perceptions of groups and/or intergroup discrimination. Although cognitive strategies, such as categorizing stimulus objects into classes and attending to distinctive stimuli, may by highly adaptive in most circumstances, it has been shown that they may also provide the foundation for stereotyping.

An alternative interpretation of the 'faulty reasoning process' notion would be that stereotyping, although not based on qualitatively different cognitive processes, does reflect a rather poor application of those processes to certain classes of social stimuli. This view would simply argue that stereotypic conceptions are unfounded over-generalizations, that the perceiver has not used the available information in an optimal manner, that he/she has based his/her conclusions upon a particular social group on poor evidence; etc. In this case, the perceiver's processes are inferior or faulty only in comparison to a model of the 'rational man'. However, the finding that a perceiver does not use the information in an optimal manner is certainly not unique to stereotyping; numerous studies have demonstrated how our cognitive mechanisms fail to approach the specifications of such a model. Thus, whereas stereotyping may involve a 'faulty reasoning process' in this sense, it is not because of anything specific to the perception of different groups. It would seem more appropriate in terms of potential benefit to recognise the similarity of these processes to those employed in the judgement of circles and squares of different colours, of lines of varying length, and of pairs of words. In doing so, we may not only learn something about the cognitive bases of stereotypic conceptions of social groups, but we may also discover some of the socially significant consequences of the limitations of man's basic

cognitive processes.

# CHAPTER THREE

# 3. EXPERIMENT 1: PEOPLE'S PERCEPTIONS OF THOSE WHO HAVE BEEN LABELLED 'AN ALCOHOLIC', 'A HEROIN ADDICT', AND 'A SMOKER'

## 3.1. Introduction

The previous chapters have introduced the reader to an analysis of the origins and functions of stereotypes as they exist and operate in society as a whole. Little has been said about stereotyping as it relates to addiction. The first part of this thesis concerns itself with this topic.

The importance of stereotyping in addiction cannot be underestimated. Firstly, there seems to be some theoretical justification for hypothesising that the stereotypes or cultural images of the 'addict' not only determine official policies to deal with such people, but also shape or influence 'scientific' theories of addiction. There are several studies which can provide direct or indirect support for this hypothesis (cf Connor, 1972; Goodwin, 1971; Lauer, 1971; Lindesmith, 1968; Szasz, 1970, 1974; Townsend, 1975).

This hypothesis can also be derived from the thesis of the sociology of knowledge advanced by Mannheim (1966), according to which the content and

the criteria for validation of scientific theories are socially determined. That is to say that, theories of the social sciences as well as those of the natural sciences do not reconstruct a fixed ontological 'reality', but an ever-evolving reality embedded in a sociohistorical network (Goldberg, 1972, Movahedi, 1976).

The claim that many theories in the social and behavioural sciences reflect to a great extent the social and political ideology of the theorist is no longer considered radical or unsubstantiated. And it is naive to maintain that observations can provide the ultimate evaluative criteria for the soundness of such theories. For even the most elementary are theoretically laden and theories shape and structure the observations on which they are claimed to stand (Feyerabend, 1965, Hanson, 1965). Thus, it is of little wonder that observations of theorists usually tend to confirm their theories.

In the area of drug use, some writers, such as Helmer (1974) and Szasz (1974) have ventured a sociohistorical analysis of the development of popular conceptions, as well as the 'scientific', theories of addiction, and have exposed the racist and class-orientated dimensions of many drug related issues. The work of these writers as well as the classic study of Lindesmith (1968), suggests that the behaviour scientist (and some clinicians) have adopted the

popular conception of the 'addict' and attempted to formulate theories about addiction and the personality of the 'addict' consistent with those conceptions.

Secondly, stereotypes may also play an important role in the initiation of substance use. This may arise from widely held but misinformed concepts about those who are 'addicted'. For example, one possible area of misinformation, particularily amongst teenagers, concerns beliefs about smokers. Such beliefs could be material to smoking decisions. For example, a belief such as 'smokers are more sophisticated than non-smokers' leads to the formation of beliefs such as 'my smoking will make me appear more sophisticated'.

According to McKennell and Bynner (1969), beliefs that smokers have attributes that non-smokers do not have can have an even more direct effect on the decision to smoke (or not to smoke). These investigators make the assumption 'that a boy will be motivated to change his behaviour in such a way as to make himself as similar as possible to the kind of boy he would like to be', (p31). Thus, for example, if a boy values 'toughness' his belief that smokers are tougher than non-smokers may make smoking more attractive to him.

Such considerations clearly suggest that the

public images or stereotypes of those who use an 'addictive' substance may play an important role in the initiation of taking the substance. This claim is of major concern for those involved in designing education programmes aimed at tackling the problem of addiction. And its exploration is the main objective of the following experiment.

The research to be described here is an exploratory study presented primarily to stimulate thinking and research in this area. The point of entry for this research, I believe, should firstly begin with attempting to determine the stereotypic conceptions of those with an addiction label. The addiction labels of interest to this research are: 'an alcoholic', 'a smoker', and 'a heroin addict'.

It was decided that a fruitful approach in attempting to explicate the above issue was to investigate these stereotype labels in terms of (a) a label only and (b) a label plus 'life like' information.

## 3.2. Rationale

The rationale underlying the above decision was twofold. Firstly, a wealth of evidence testifies that group labels set up expectatons for behaviour. These expectations have (amongst others) two potentially negative effects: (i) they influence the behaviour of

the ingroup member and (ii) they influence how the behaviour of the outgroup member will be interpretated, (chapter 1).

Again, research into this area has focused mainly on racial stereotyping. The classic experiment by Duncan (1976) may serve as an illustration. He asked people to observe a videotape of a discussion between two subjects (experimenter assistants). The discussion evolved into a heated argument with one of the subjects mildly pushing the other. Duncan varied the race of the discussants (both black and white, or one black and the other white). Observers were asked to code the behaviour and to attribute causality to the act of pushing. When a black pushed a white 75% of the observers (who were white) labelled the act as violent; when a black pushed a black, 69% termed the act as violent. However, when a white pushed a black, only 17% coded the act as violent. When a white pushed a white only 13% saw the act as violent. Thus, when whites were in the role of the transgressor, the act was interpreted more leniently. The term violent was far more readily applied to the same act when the actor was black. Less than 10% of observers saw a black person's act of pushing as playing around or dramatising. Furthermore, when the act was performed by a white person, attributions were higher for situational than for personal causality. The essential features of this have been replicated by

Sagar and Schofield (1980) who found in white and black children the same tendency to interpret ambigious aggressive acts as more mean and threatening when committed by a black actor than when committed by a white actor.

When applied to stereotypes, this line of research suggests that a group label sets up expectancies that modify our behaviour towards outgroup members in a way that leads them to confirm the expectancies (cf Snyder and Swann, 1978). Even when the expectancies are not fulfilled in the outgroup behaviour, they still can influence interpretation of outgroup behaviour. The reason is that people tend to see behaviour that confirms their expectancies even when it is absent (Cooper and Fazio, 1979).

Another bias in the intrepretation of outgroup behaviour occurs when behaviour that is inconsistent with expectations is attributed to external factors, (Regan, Straus, and Fazio, 1974). In addition, when stereotypes set up expectations for behaviour, disconfirming evidence tends to be remembered, (Rothbart, Evans and Fulero, 1979). This may be one of the reasons that stereotypes typically change at such a glacial rate. In the realm of individual behaviour, it means that outgroup members will have considerable difficulty being viewed in non-stereotyped ways.

Stereotypes set up expectations that may be confirmed because of the effects of the expectancies on behaviour of ingroup and outgroup members, or the expectancies may be perceived as having been confirmed even when they have not. In both cases people probably feel secure in attributing the stereotyped trait to the other person. This circular attribution process is completed when the group label that generated the original expectancy is used as the ultimate explanation of the behaviour of the outgroup member. For instance, if a white person is expected to and does act in an exploitative manner, then the explanation will be that he/she is white. Thus, both group labels and the characteristic features of stereotypes furnish causal explanations for behaviour.

Secondly, in many instances, stereotypic conceptions are developed without any personal contact with the steroetyped group. As Lipperman has emphasized, no single individual can have more than limited contact with the multitude of personal experiences and social situations that characterise a complex society. For that reason alone, stereotyping becomes common and almost necessary. It is certainly true that the opinions on deviance of many 'normals' are developed without any direct contact with the deviator. The apparent desire to avoid such direct contact very probably exacerbates the situation; those

who conform frequently experience grave discomfort just thinking about various kinds of deviations, let alone confronting them directly. To the extent that this avoidance tendency is present, the likelihood of reliance on stereotypes is highlighted for it offers a relatively comfortable way of dealing with threatening behaviour. It was therefore of interest to determine whether subjects' ratings of the labels 'an alcoholic', 'a smoker', and 'a heroin addict' would be influenced if these labels were accompanied by a photograph of a supposed 'alcoholic', 'smoker', and 'heroin addict'.

Some of the consequences of deviance should be apparent. At the level of direct personal interaction, it significantly influences the expectations of others, causing serious problems of response and identity for the deviants. As studies by Scheffe, Scott and others have made clear, definitions of the situation held by those reacting to the deviation, definitions that are often shaped primarily by stereotyped beliefs, can indeed have so overpowering an impact that the deviating individual may find himself unable to sustain any alternative definition of himself. Stereotyping is also elaborated at the level of public decision making and organizational processing.

Stereotyping, thus, can serve at all levels to instigate or propel mechanisms of self-fulfilling

prophecy. It involves a tendency to jump from a single cue to an actual or suspected or alleged behaviour to a more general picture of the 'kind of person' with whom we are dealing.

Stereotypes give ingroup members the impression that they possess considerable information about traits of the outgroup members. While there may be some overlap, there are likely to be more differences than similarities. These presumed disimilarities may lead to reinforced negative attitudes and behaviour towards the outgroup.

Although there has been a considerable amount of work carried out on impressionistic accounts of the 'alcoholic' (e.g. Romney and Bynner, 1972; Knox, 1971; etc.,) most of these studies have confined themselves to the professional field. To the author's knowledge no previous research has contrasted people's popular conceptions of the 'smoker', the 'alcoholic', and the 'heroin addict' in the presence and absence of lifelike information. The aim of this research was thus twofold: (a) to examine the popular stereotypes of 'a smoker', 'an alcoholic', and 'a heroin addict' and (b) to determine whether these stereotypes would alter if accompanied by a photograph of a supposed member of these three groups.

## 3.3. Method

Design. The experiment consisted of two conditions: a 'no photo condition' and a 'photo condition'. To avoid alerting subjects to the main purpose of the investigation, the experiment used an independent group design. 192 subjects participated in the study (2 groups of 96 subjects in each condition). Each condition was made up of 24 people who were experiencing porblems through drink; 24 people who habitually used heroin; 24 current cigarette smokers and 24 people who did not smoke or use heroin but, drank occasionally (control group).

Subjects. The control group was obtained from a sample of the general population selected from the electoral register. Social class and location was controlled. The 'drinkers' sample was drawn from alcohol treatment units in the centre of Glasgow. The heroin using sample was obtained through various treatment clinics in and around Glasgow and via a local prison. Due to difficulty in obtaining heroin users without contaminating other research in progress, this group was more heterogeneous than the other sample groups. However, attempts were made to match the two groups. A detailed description of the sample and the source of contact is given Table 1.

TABLE 1: Table of Subjects who Participated in Experiment 1 Classified by Group, Age, Sex and Source of Contact

Condition: No Photo

| Group: | Mean Age | Sex M | Sex F | Source of Contact 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 * |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Smoker | 33.3 | 52% | 48% | 24 | | | | | | | |
| Problem Drinker | 40 | 64% | 36% | | 10 | 8 | 6 | | | | |
| Heroin User | 22 | 79% | 21% | | | | | 4 | 10 | 2 | 8 |
| Control | 29.8 | 49% | 51% | 24 | | | | | | | |

Condition: Photo

| Group | Mean Age | Sex M | Sex F | Source of Contact 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 * |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Smoker | 31.1 | 41% | 59% | 24 | | | | | | | |
| Problem Drinker | 43.9 | 68% | 32% | | 17 | | 7 | | | | |
| Heroin User | 27.3 | 81% | 19% | | | | | | 14 | 1 | 9 |
| Control | 32.5 | 40% | 60% | 24 | | | | | | | |

* 1. Electoral Register
2. Alcohol Treatment Unit, Gartnaval Hospital
3. Charing Cross Alcohol Treatment Unit
4. Talbot Centre
5. Duke Street Hospital Drug Clinic
6. ECODA, Easterhouse
7. Possil Drug Line, Possilpark
8. Perth Prison

Procedure. The scales employed in the experiment consisted of 23 seven-point semantic differential scales drawn from Romney and Bynner (1972). These scales were developed by these researchers in studies of smoking and were derived from exploratory interviews at the pilot stage of their research. They argue that the scales enables the researcher to quantify people's subjective impressions of groups of individuals in terms of an empirically derived framework. The scales employed were as follows:

Scale:

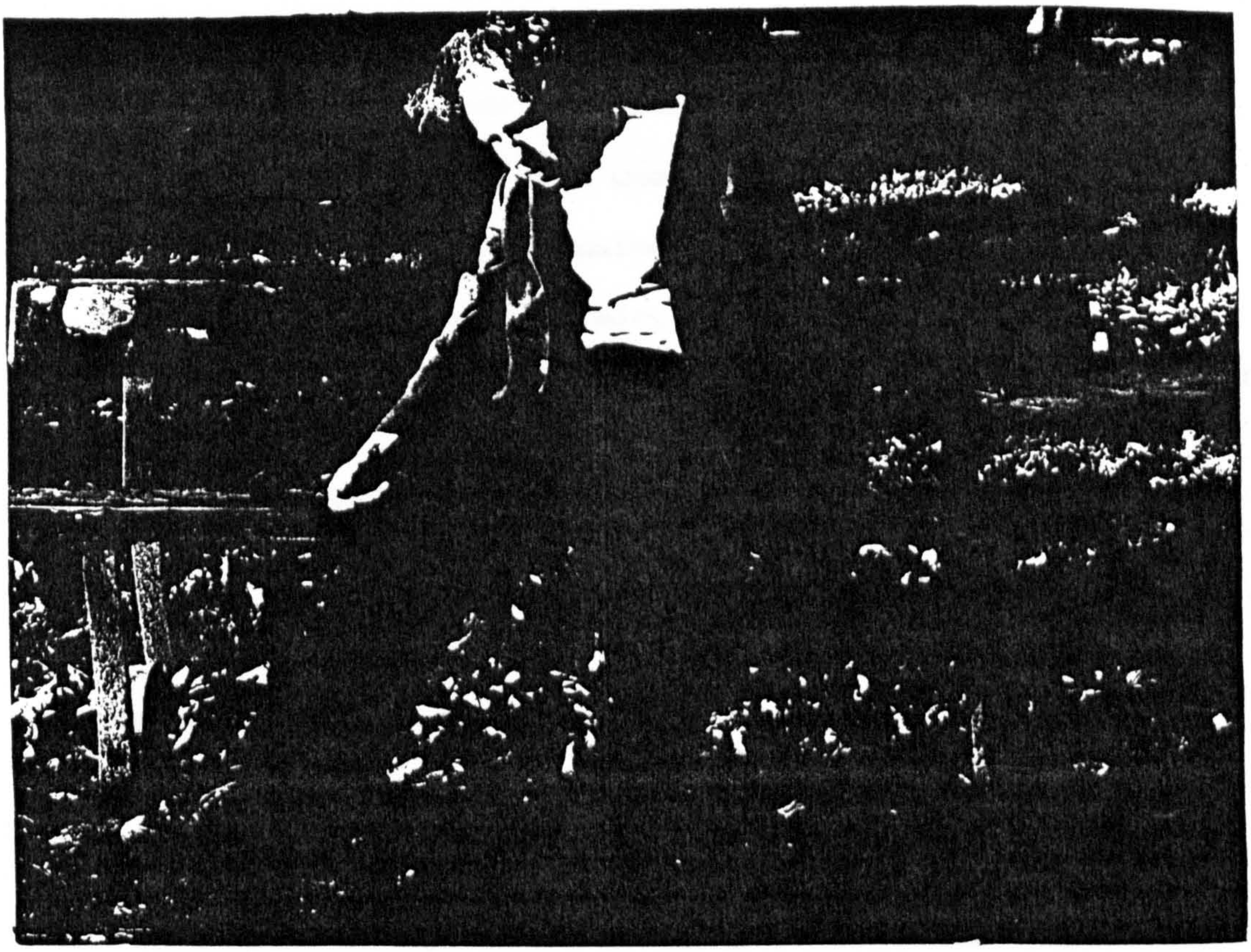
1. Scruffy/Neat Appearance.
2. Evasive/Frank.
3. Down to Earth/Imaginative.
4. Curable/Incurable.
5. Dangerous/Harmless.
6. Timid/Self-Assertive.
7. Law-Abiding/Criminal.
8. Takes Time to Decide/Impulsive.
9. Conventional/Unconventional.
10. Placid/Aggressive.
11. Intelligent/Stupid.
12. Menacing/Friendly.
13. Cautious/Adventurous.
14. Weak Influence on Others/Strong Influence on Others.
15. Chaste/Sexually Promiscuous.
16. Forceful/Mild.
17. Depressed/Elated.
18. Self Confident/Shy.
19. Unselfish/Selfish.
20. Uncultured/Cultured.
21. Sexually Potent/Sexually Impotent.
22. Trend-Setting/Follows Fashion.
23. Submissive/Dominating.

All subjects were requested to rate the concepts 'a smoker', 'an alcholic', and 'a heroin addict' on the above scales according to how he/she perceived them. In an experimental design such as is used in

this experiment, it is important to control for contamination between the three concepts. To achieve this the concepts 'an agrophobic', 'an epileptic', 'a depressive', and 'a psychopath' were inter-spread between the 'addiction' concepts. This precaution also served to prevent subjects from realising that the study was concerned with addiction groups. These additional concepts were not analysed.

In the 'no photo' condition subjects were given a booklet Containing the 8 questionnaires and were requested to rate only the concepts.

In the 'photo' condition subjects were given an identical booklet. However, each concept was accompanied by a photograph of a supposed alcholic, (epileptic, heroin addict or whatever). At the top of each questionnaire was printed 'This person is an alcoholic (epileptic, heroin addict or whatever)'. To ensure that differences between the concept ratings were not due to real differences between the people photographed, a set of 24 prints was prepared which were rotated over all the concept conditions an equal number of times. The photographs were taken and processed professionally yielding black and white prints 7" x 5". An example is presented below.



The photographs presented were arranged in a way that controlled for sex, age and class variables. The complete set of photographs used and examples of the two questionnaires are presented in Appendices 1 and 2 respectively.

Questionnaires were completed individually wherever was convenient for the subject (at home, in a clinic, at a drug centre, etc.). All concepts were

given in a random order in an attempt to avoid position effects. Subjects were informed that the study was an investigation into how 'labelled' groups in society are perceived. They were urged not to agonise too long over each item since their first thoughts would be the most useful. Time to complete the questionnaire was approximately 15 minutes. All subjects were assured anonymity.
All subjects were debriefed after completing the questionnaire.

## 3.4. Results: No photo condition

Three factor analyses were carried out under each condition by means of principal components analysis followed by varimax rotation (othogonal). Four factors were extracted for each questionnaire which had eigenvalues greater than unity and accounted for the largest proportion of the variance. The rotated factor matrices, significant items and percentages of variance for the 'no photo condition are presented in Table 2.

Table 2:

Part (i): Semantic Differential Factor Loadings for the 'Smoker' Questionnaire, **No Photo Condition.** (N=96)

| Scale | Rotated Factors | | | |
|---|---|---|---|---|
| | 1 | 11 | 111 | 1V |
| 1.Scruffy/neat appearance | -.56 | | | |
| 2.Evasive/frank | -.40 | .68 | | |
| 3.Down to earth/imaginative | | | | .59 |
| 4.Durable/incurable | | | | .49 |
| 5.Dangerous/harmless | | -.40 | -.43 | |
| 6.Timid/self-assertive | -.56 | | | |
| 7.Law-abiding/criminal | .48 | | | |
| 8.Takes time/impulsive | | | .74 | |
| 9.Conventional/unconventional | .47 | | | |
| 10.Placid/agressive | | | .80 | |
| 11.Intelligent/stupid | .56 | | .52 | |
| 12.Menacing/friendly | | -.63 | | |
| 13.Cautious/adventurous | | | .32 | .39 |
| 14.Weak influence/strong | | | | .51 |
| 15.Chaste/sexually promisc | -.56 | | | |
| 16.Forceful/mild | | | | |
| 17.Depressed/elated | | | | .79 |
| 18.Self-confident/shy | .47 | | | |
| 19.Unselfish/selfish | | | | -.39 |
| 20.Unculturedd/cultured | | .66 | | |
| 21.Sex potent/sex impotent | .71 | | | |
| 22.Trend setting/foll fash | | .50 | | -.33 |
| 23.Submissive/dominating | | .60 | | |

Percentage variance = 43.7%

Eigenvalues:- (i) 3.46, (ii) 2.47, (iii) 2.08, (iv) 2.02

Table 2 (continued)

Part (ii): Semantic Differential Factor Loadings for the 'Alcoholic' Questionnaire, **No Photo** condition. (N=96)

| Scale | Roated Factors | | | |
|---|---|---|---|---|
| | 1 | 11 | 111 | 1V |
| 1.Scruffy/neat appearance | | .64 | | |
| 2.Evasive/frank | | | | .47 |
| 3.Down earth/imaginative | | | | |
| 4.Durable/incurable | | .45 | | |
| 5.Dangerous/harmless | | .53 | | .37 |
| 6.Timid/self-assertive | .43 | | .45 | |
| 7.Law-abiding/criminal | .63 | | | |
| 8.Takes time/impulsive | .37 | .33 | | |
| 9.Conventional/unconventional | .70 | | | |
| 10.Placid/aggressive | .63 | | | |
| 11.Intelligent/stupid | .36 | | | .59 |
| 12.Menacing/friendly | | .41 | -.33 | .36 |
| 13.Cautious/adventurous | | .35 | | |
| 14.Weak influence/strong | | | .38 | |
| 15.Chaste/sexually promisc | .41 | .40 | | |
| 16.Forceful/mild | | | -.59 | |
| 17.Depressed/elated | | | | .70 |
| 18.Self confident/shy | .47 | | -.69 | |
| 19.Unselfish/selfish | .63 | | | |
| 20.Uncultured/cultured | | .67 | .31 | |
| 21.Sex potent/sex impotent | .50 | | | |
| 22.Trend-setting/foll fash | | | | .50 |
| 23.Submissive/diminating | | | .72 | |

Percentage variance = 42.6%

Eigenvalues:- (i) 3.47, (ii) 2.76, (iii) 1.94, (iv) 1.62

Table 2 (continued)

Part .(iii): Semantic Differential Loadings for the 'Heroin Addict' Questionnaire, **No Photo** condition. (N=96)

| Scale | Roated Factors | | | |
|---|---|---|---|---|
| | 1 | 11 | 111 | 1V |
| 1.Scruffy/neat | .73 | -.45 | | |
| 2.Evasive/frank | | -.41 | | |
| 3.Down earth/imaginative | | | | .54 |
| 4.Curable/incurable | | | | |
| 5.Dangerous/harmless | .61 | | | .32 |
| 6.Timid/self-assertive | | .69 | | |
| 7.Law-abiding/criminal | | | .43 | .39 |
| 8.Takes time/impulsive | | | | |
| 9.Conventional/unconventional | | | .53 | .41 |
| 10.Placid/aggressive | .62 | .49 | .42 | |
| 11.Intelligent/stupid | | | .61 | |
| 12.Menacing/friendly | .55 | | | |
| 13.Cautious/adventurous | .32 | | | |
| 14.Weak influence/strong | | | | |
| 15.Chaste/sex promisc | | | | .60 |
| 16.Forceful/mild | .73 | | | |
| 17.Depressed/elated | .45 | -.57 | | |
| 18.Self-confident/shy | | -.67 | .37 | |
| 19.Unselfish/selfish | | | .63 | |
| 20.Uncultured/cultured | .50 | | | |
| 21.Sex pot/sex impot | | | .65 | |
| 22.Trend-sett/foll fash | | | | .49 |
| 23.Submissive/dominating | | .52 | | |

Percentage variance = 43.2%

Eigenvalues:- (i) 3.86, (ii) 2.94, (iii) 1.79, (iv) 1.70

It is apparent that some factors emerged with some regularity from each of these analyses. It is not suggested that these individual factors are necessarily the same factors. However, since they share the most items and were judged by two independent raters to be similar, there is some justification in labelling and discussing them in a collective way. The items shared by the three groups are marked with an asterisk.

For ease of inspection and interpretation of the factors to be discussed from the **no photo** condition, Table 3 contains the individual factors with their item loadings rank ordered.

Table 3: Factors to be Discussed, **No Photo** Condition.

Part (i)

Factor A: **Social Conformity**

Factor 1 Smoker Questionnaire

| | | |
|---|---|---|
| Item 21 | .71 | Sexually potent/sexually impotent * |
| " 6 | -.56 | Timid/self-assertive * |
| " 15 | -.56 | Chaste/sexually promiscuous * |
| " 11 | .56 | Intelligent/stupid * |
| " 1 | -.56 | Scruffy/neat appearance |
| " 7 | .48 | Law-abiding/criminal * |
| " 18 | .47 | Self-confident/shy * |
| " 9 | .47 | Conventional/unconventional * |
| " 2 | -.40 | Evasive/frank |

Factor 1 Alcoholic Questionnaire

| | | |
|---|---|---|
| Item 9 | .70 | Conventional/unconventional * |
| " 10 | .63 | Placid/aggressive * |
| " 19 | .63 | Unselfish/selfish * |
| " 7 | .63 | Law-abiding/criminal * |
| " 21 | .50 | Sexually potent/sexually impotent * |
| " 18 | .47 | Self-confident/shy * |
| " 6 | .43 | Timid/self-assertive |
| " 15 | .41 | Chaste/sexually promiscuous |
| " 8 | .37 | Takes time to decide/impulsive * |
| " 11 | .36 | Intelligent/stupid * |

Factor 111 Heroin Addict Questionnaire

| | | |
|---|---|---|
| Item 21 | .65 | Sexually potent/sexually impotent * |
| " 19 | .63 | Unselfish/selfish * |
| " 11 | .61 | Intelligent/stupid * |
| " 9 | .53 | Conventional/unconventional * |
| " 7 | .43 | Law-abiding/criminal * |
| " 10 | .42 | Placid/aggressive * |
| " 18 | .37 | Self-confident/shy * |

Table 3 (continued)

Part (ii)

Factor B **Unassertiveness**

| | | | |
|---|---|---|---|
| Factor 11 | | Smoker Questionnaire | |
| Item | 2 | .68 | Evasive/frank * |
| " | 20 | .66 | Uncultured/cultured * |
| " | 12 | -.63 | Menacing/friendly |
| " | 23 | .60 | Submissive/dominating * |
| " | 22 | .50 | Trend setting/follows fashion |
| " | 5 | -.40 | Dangerous/harmless |
| Factor 111 | | Alcoholic Questionnaire | |
| Item | 23 | .72 | Submissive/dominating * |
| " | 18 | -.69 | Self confident/shy |
| " | 16 | -.59 | Forceful/mild |
| " | 6 | .45 | Timid/self-assertive |
| " | 14 | .38 | Weak influence/strong influence |
| " | 12 | -.33 | Menacing/friendly * |
| " | 20 | .31 | Uncultured/cultured * |
| Factor 11 | | Heroin Addict Questionnaire | |
| Item | 6 | .69 | Timid/self asertive |
| " | 18 | -.67 | Self confident/shy |
| " | 17 | -.57 | Depressed/elated |
| " | 23 | .52 | Submissive/dominating * |
| " | 10 | .49 | Placid/aggressive |
| " | 1 | -.45 | Scruffy/neat appearance |
| " | 2 | -.41 | Evasive/frank * |

Table 3 (continued)

Part (iii)

Factor C **Dangerousness**

| | | |
|---|---|---|
| Factor 111 | Smoker Questionnaire | |
| Item 10 | .80 | Placid/aggressive |
| " 8 | .74 | Takes time to decide/impulsive |
| " 11 | .52 | Intelligent/stupid |
| " 5 | -.43 | Dangerous/harmless * |
| " 13 | .32 | Cautious/adventurous * |
| Factor 11 | Alcoholic Questionnaire | |
| Item 20 | .67 | Uncultured/cultured * |
| " 1 | .64 | Scruffy/neat appearance * |
| " 5 | .53 | Dangerous/harmless * |
| " 4 | .45 | Curable/incurable |
| " 12 | .41 | Menacing/friendly * |
| " 15 | .40 | Chaste/sexually promiscuous |
| " 13 | .35 | Cautious/adventurous * |
| " 8 | .33 | Takes time to decide/impulsive * |
| Factor 1 | Heroin Addict Questionnaire | |
| Item 16 | .73 | Forceful/mild |
| " 1 | .73 | Scruffy/neat * |
| " 10 | -.62 | Placid/aggressive |
| " 5 | .61 | Dangerous/Harmless * |
| " 12 | .55 | Menacing/friendly * |
| " 20 | .50 | Uncultured/cultured * |
| " 17 | .45 | Depressed/elated *. |
| " 13 | .32 | Cautious/adventurous * |

Factor 1, Table 3: (i), is composed of items that seem to suggest that it is a social conformity factor. However, from an inspection of Table 3: (i) it is clear that sexual potency is perceived to be associated with smokers and heroin addicts rather than with alcoholics.

The second factor to emerge in common for the three groups appears to be an (un)assertiveness factor (Table 3 (ii). Although this factor is weaker than factor 1, the items shared by the three groups seem to express a moderate consensus of opinion. The highest loading items for the smoker, however, indicate that evasiveness and unculturedness are believed to be more important traits for this group than unassertiveness.

The final factor to emerge in common appears to be a dangerousness factor. An inspection of Table 3: (iii) demonstrates that this dangerousness dimension is perceived to be associated more with heroin users than alcoholics. The items (e.g. forceful, scruffy, evasive, dangerous, menacing etc.,) clearly illustrate that respondents perceive heroin users as being distinctively dangerous. Smokers do not load on this dangerousness factor and are clearly differentiated from the other two groups.

## 3.5. Results: Photo condition

Table 4 contains the rotated factor matrices,

significant items and percentage of variance for the 'photo' condition.

Table 4

Part (i): Semantic Differential Factor Loadings for the 'Smoker' Questionnaire, **Photo** Condition. (N=96).

| Scale | Rotated Factors | | | |
|---|---|---|---|---|
| | 1 | 11 | 111 | 1V |
| 1.Scruffy/neat appearance | -.61 | | | |
| 2.Evasive/frank | .46 | | | |
| 3.Down to earth/imaginative | | | .35 | |
| 4.Durable/incurable | | .39 | .35 | .45 |
| 5.Dangerous/harmless | -.45 | | | |
| 6.Timid/self assertive | | | .48 | |
| 7.Law abiding/criminal | .70 | | -.32 | |
| 8.Takes time /impulsive | | | .68 | |
| 9.Conventional/unconventional | .53 | | | -.30 |
| 10.Placid/aggressive | | | .35 | -.49 |
| 11.Intelligent/stupid | | | .34 | .64 |
| 12.Menacing/friendly | | | | |
| 13.Cautious/adventurous | | | .53 | |
| 14.Weak/strong influence | .40 | .52 | | |
| 15.Chaste/sexually promisc | | .51 | | |
| 16.Forceful/mild | | | | .74 |
| 17.Depressed/elated | | .60 | | |
| 18.Self confident/shy | | -.71 | | |
| 19.Unselfish/selfish | -.40 | | .56 | |
| 20.Uncultured/cultured | -.44 | .47 | | |
| 21.Sex potent/impotent | | -.35 | | .47 |
| 22.Trend setting/foll fash | | | .43 | |
| 23.Submissive/dominating | | .78 | | |

Percentage Variance = 45.5%

Eigenvaluess (i) 3.50, (ii) 3.24, (iii) 1.94, (iv) 1.76

Table 4 (continued)

Part (ii): Semantic Differential Factor Laodings for the 'Alcoholic' Questionnaire, **Photo** Condition. (N=96)

| Scale | Rotated Factors | | | |
|---|---|---|---|---|
| | 1 | 11 | 111 | 1V |
| 1.Scruffy/neat appearance | | .65 | | |
| 2.Evasive/frank | | | .61 | |
| 3.Down to earth/imaginative | | | | .71 |
| 4.Curable/incurable | | -.45 | .45 | |
| 5.Dangerous/harmless | -.57 | | | |
| 6.Timid/self assertive | .50 | | .50 | |
| 7.Law-abiding/criminal | .64 | | | |
| 8.Takes time/impulsive | | | .45 | |
| 9.Conventional/unconventional | .38 | | | .36 |
| 10.Placid/aggressive | .79 | | | |
| 11.Intelligent/stupid | | -.60 | | |
| 12.Meancing/friendly | -.69 | | | |
| 13.Cautious/adventurous | | | .61 | |
| 14.Weak/strong influence | | .52 | .50 | |
| 15.Chaste/sexually promisc | | .61 | | |
| 16.Forceful/mild | -.76 | -.30 | | |
| 17.Depressed/elated | -.41 | | .55 | |
| 18.Self confident/shy | | | | .78 |
| 19.Unselfish/selfish | .58 | | | |
| 20.Uncultured/cultured | -.35 | | | |
| 21.Sexually potent/impotent | | -.75 | | |
| 22.Trend setting/foll fashion | | | | .43 |
| 23.Submissive/dominating | .36 | .33 | .44 | |

Percentage Varaince = 48.4%

Eigenvalues (i) 4.00, (ii) 3.28, (iii) 2,12, (iv) 1.71

Table 4 (continued.

Part (iii): Semantic Differential Factor Loadings for the 'Heroin Addict' Questionnaure, **Photo** Condition. (N=96)

| Scale | Rotated Factors | | | |
|---|---|---|---|---|
| | 1 | 11 | 111 | 1V |
| 1.Scruffy/neat appearance | -.41 | .31 | | |
| 2.Evasive/frank | -.47 | .33 | | |
| 3.Down to earth/imaginative | .43 | | | |
| 4.Durable/incurable | | | .64 | |
| 5.Dangerous/harmless | -.68 | | -.33 | |
| 6.Timid/self assertive | | | | |
| 7.Law-abiding/criminal | .66 | | | |
| 8.Takes time/impulsive | .45 | .31 | -.34 | |
| 9.Conventional/unconventional | .69 | | | |
| 10.Placid/aggressive | .59 | .37 | .30 | |
| 11.Intelligent/stupid | | | .68 | |
| 12.Meancing/friendly | -.45 | | -.43 | |
| 13.Cautious/adventurous | | .54 | | .35 |
| 14.Weak/strong influence | | .66 | | |
| 15.Chaste/sexually promiscu | | | | |
| 16.Forceful/mild | -.49 | | | .44 |
| 17.Depressed/elated | -.37 | .45 | -.32 | |
| 18.Self confident/shy | | -.43 | | .67 |
| 19.Unselfish/selfish | .59 | | | |
| 20.Uncultured/cultured | -.31 | | -.47 | |
| 21.Sex potent/impotent | | | .55 | |
| 22.Trend setting/foll fashion | | | | |
| 23.Submissive/dominating | | .59 | | |

Percentage Variance = 44.2%

Eigenvalues (i) 4.36, (ii) 2.66, (iii) 1.98, (iv) 1.59

It should be apparent that the factors to emerge form these analyses are very general and diffuse. However, two factors emerge which appear to be common to the three groups.

Again, for ease of inspection and interpretation, Table 5 contains the individual factors with their associated loadings rank ordered. It is reiterated that it is not the suggestion of the author that these individual factors are the same factors. However, since they share most of the items (marked with an asterisk) and were also judged to be similar by two independent raters, they will be discussed in a collective way.

Table 5: Factors to be discussed **photo** condition.

Part (i)

Factor A **Conventional/Harmless**

| | | | |
|---|---|---|---|
| Factor 1 | | Smoker Questionnaire | |
| Item | 7 | .70 | Law-abiding/criminal * |
| " | 1 | -.61 | Scruffy/neat appearance * |
| " | 9 | .53 | Conventional/unconventional * |
| " | 2 | .46 | Evasive/frank * |
| " | 5 | -.45 | Dangerous/harmless * |
| " | 20 | -.44 | Uncultured/cultured * |
| " | 14 | .40 | Weak influence/strong influence * |
| " | 19 | -.40 | Unselfish/selfish * |
| Factor 1 | | Alcoholic Questionnaire | |
| Item | 10 | .79 | Placid/aggressive * |
| " | 16 | -.76 | Forceful/mild |
| " | 12 | -.69 | Menacing/friendly |
| " | 7 | .64 | Law-abiding/criminal * |
| " | 19 | .58 | Unselfish/selfish |
| " | 5 | -.57 | Dangerous/harmless * |
| " | 9 | .38 | Unconventional/conventional * |
| " | 20 | -.35 | Uncultured/cultured * |
| " | 6 | .50 | Timid/self assertive |
| " | 17 | -.41 | Depressed/elated |
| " | 23 | .36 | Submissive/dominating |
| Factor 1 | | Heroin Addict Questionnaire | |
| Item | 9 | .69 | Unconventional/conventional * |
| " | 5 | -.68 | Dangerous/harmless * |
| " | 7 | .66 | Law-abiding/criminal * |
| " | 19 | .59 | Unselfish/selfish * |
| " | 10 | .59 | Placid/aggressive * |
| " | 16 | -.49 | Forceful/mild * |
| " | 2 | -.47 | Evasive/frank * |
| " | 8 | .45 | Takes time to decide/impulsive |
| " | 12 | -.45 | Menacing/friendly |
| " | 3 | .43 | Down to earth/imaginative |
| " | 1 | -.41 | Scruffy/neat * |
| " | 17 | -.37 | Depressed/elated * |
| " | 20 | -.31 | Uncultured/cultured * |

Table 5 (continued)

Part (ii)

Factor B **Cautiousness**

| | | | |
|---|---|---|---|
| Factor 111 | | Smoker Questionnaire | |
| Item | 8 | .68 | Takes time to decide/impulsive * |
| " | 19 | .56 | Unselfish/selfish |
| " | 13 | .53 | Cautious/adventurous * |
| " | 6 | .48 | Timid/self assertive * |
| " | 22 | .43 | Trend setting/follows fashion * |
| " | 3 | .35 | Down to earth/imaginative |
| " | 10 | .35 | Placid/aggressive * |
| " | 4 | .35 | Curable/incurable * |
| " | 11 | .34 | Intelligent/stupid |
| " | 7 | -.32 | Law-abiding/criminal |
| Factor 111 | | Alcoholic Questionnaire | |
| Item | 13 | .61 | Cautious/adventurous * |
| " | 2 | .61 | Evasive/frank |
| " | 17 | .55 | Depressed/elated |
| " | 6 | .50 | Timid/self assertive * |
| " | 14 | .50 | Weak influence/strong influence |
| " | 8 | .45 | Takes time to decide/impulsive * |
| " | 4 | .45 | Curable/incurable * |
| " | 23 | .44 | Submissive/dominating |
| Factor 11 | | Heroin Addict Questionnaire | |
| Item | 14 | .66 | Weak influence/strong influence * |
| " | 23 | .59 | Submissive/dominating * |
| " | 13 | .54 | Cautious/adventurous * |
| " | 17 | .45 | Depressed/elated * |
| " | 18 | -.43 | Self-confident/shy |
| " | 10 | .37 | Placid/aggressive * |
| " | 2 | .33 | Evasive/frank * |
| " | 8 | .31 | Takes time to decide/impulsive * |
| " | 1 | .31 | Scruffy/neat appearance |

The first factor in common to emerge from the three groups appears to be a conventional/harmless factor, Table 5: (i). Admittedly, this label does not encompass the wide range of items comprising this factor; However, from an inspection of the items

shared by the three groups it can be seen that there is a theme of conventionality and harmlessness.

The second factor in common to emerge from these analyses appears to be a cautiuosness factor (Table 5: (ii). This factor again emerges for the three groups and is composed of items that seem to emphasise cautiousness.

## Further Scoring

To determine whether perceptions differed for each of the three concepts between the four groups, a series of one-way analyses of variance was carried out on each group's factor score for the three concepts under the two conditions (photo and no-photo).

Factor scores were computed using the regression method (Harman, 1967). Scores were standardised for the whole sample so that each group had a mean of zero and variance equal to one.

Two significant results emerged from this comparison from the 'no photo' condition. This was for the concept 'heroin addict' on factor 1 (dangerousness) and factor 11 (unassertiveness). The 'photo' condition yielded no significant results.

The way in which the different groups perceived the concept heroin addict on these two factors can be deduced from Table 6.

Table 6: One-Way Analyses of Variance Between the Four Groups for the Element Heroin Addict (Rotated Factors) No Photo Condition.

| Factor | Concept | Group | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Control | | Smoker | | Problem Drinker | | Heroin User | | |
| | | (N=24) | | (N=24) | | (N=24) | | (N=24) | | |
| 1 | Heroin Addict | m | sd | m | sd | m | sd | m | sd | |
| | | .60 | .65 | .27 | .67 | .32 | .80 | -1.16 | .76 | * |
| 11 | " | -.28 | 1.01 | -.15 | .90 | -.22 | 1.14 | .64 | .61 | * |

* p<0.001

It can be seen from Table 6 that there is a marked discrepancy between the way in which the control group, problem drinkers, and the smokers perceive heroin addicts and the way in which heroin users perceive them.

In order to determine which of the groups scored differentially on these two factors, a post-hoc significance test, based on Scheffe procedure, was carried out. The results of this analysis are presented in Table 7.

Table 7: Comparisons of Each Groups Score on Factors 1

and 11 (Scheffe Procedure)

Factor 1 Dangerousness

| Mean | Group | 4 | 2 | 3 | 1 |
|---|---|---|---|---|---|
| -1.16 | 4 | | | | |
| .27 | 2 | ** | | | |
| .32 | 3 | ** | | | |
| .60 | 1 | ** | | | |

Factor 11 Unassertiveness

| Mean | Group | 1 | 3 | 2 | 4 |
|---|---|---|---|---|---|
| -.28 | 1 | | | | |
| -.22 | 3 | | | | |
| -.15 | 2 | | | | |
| .64 | 4 | * | * | * | |

(SEE FOOTNOTE)

**Denotes pairs of groups significantly different at $p<0.01$.

* Denotes pairs of groups significantly different at $p<0.05$.

It can be seen from Table 7 above that smokers, problem drinkers, and controls agree that heroin addicts are dangerous and unassertive. Heroin users, on the other hand, perceive them as being harmless and assertive.

3.6. Discussion

The results from Experiment 1 are important in our understanding of the way in which various groups who use addictive substances are perceived.

Footnote: Scores on Factor 11 should be read in reverse of as are presented.

The most interesting result to emerge from the study is the relative effectiveness the two mediums of communication had on influencing peoples' perceptions of alcoholics and heroin users. It should be apparent that the factors which emerged under the 'no photo' condition clearly discriminated between the three groups. Whereas, in the 'photo' condition the factors to emerge are clearly very broad and general with no discriminatory value. It appears that, in the case of alcoholics and heroin users, judgements made in the specific instance (i.e. the 'photo' condition) are less hostile than judgements made in the abstract instance (i.e. the 'photo' condition).

This is not the case for smokers. When asked to rate the personality of the smoker without an accompanying photograph, subjects tended to rate him/her as socially conforming, unassertive and harmless. The addition of a photograph made no real difference to subject's judgements.

It could be argued that the image of the smoker which emerged from the study overall corresponds in a loose way to the image portrayed by cigarette advertisements. Several studies have suggested that the image potrayed by various mediums of communication are significant factors in moulding people's perceptions. For example, a recent study by Aitken, Leathar, and O'Hagan (1985) demonstrated that

cigarette advertising had a strong impact from a very early age. Adult-like perceptions of the imagery in cigarette advertising develops over the years 10 to 14 and most 14-year-olds are able to distinguish between images potrayed by cigarette advertising agencies in much the same way as adults. Cigarettes are depicted as being associated with desirabliity and status and this may be one of the reasons why the smoker, unlike the alcholic and the heroin addict, emerges in such a favourable light irrespective of medium of communication.

Turning to the perceived personalities of the alcholic and the heroin addict; in the 'no photo' condition these two groups, like the smoker, emerge as being socially conforming and unassertive. However, they are also seen as being dangerous. This dangerousness dimension is evidently perceived to be associated more with heroin addicts than alcoholics, (see Table 3: (part iii)). The combination of attributed traits perceived to be associated with heroin addicts would seem to match stereotypes of the antisocial or sociopathic individual. This is evident from an inspection of the items and their associated loading which make up this factor. This factor is unique in that these items do not appear together anywhere else in the study.

The dangerousness profile which emerged for

heroin addicts in the no photo condition corresponds closely with the clinical literature. For example Laskowitz (1965) reports that psychiatric illnesses precede or accompany 40% of drug addiction cases and that 20% of these cases appear to be sociopathic. He goes on to describe the addict as immature, neurotically impulsive, crime-prone and unable to deter immediate gratification. Similarily, Glatt (1966) concludes that "psychopathic, emotionally immature and inadequate individuals..... might become dependent on practically any drug'.

The finding that there is a readiness to see heroin users as a group as being dangerous in not new. The world of drug addiction is surrounded by many myths. Presumably because of its illegality, drug use is, and always has been, a target for the media. From H.J. Ainslinger's influencial force in establishing certain myths of the 'dope fiend', through to present day theories of the 'junkie', printed material relative to the subject of drug addiction consistently depicts and highlights sinister connotations.

Many researchers are of the agreed opinion that most drug users have some mental problem or have a weak or disturbed personality. For example, dysfunctional attitudes, and personality factors, including depression, low self-esteem, rebelliousness and low aspirations are associated with opiate addiction. These problems, it has been argued, occur as the

result of such factors as the direct effects of intoxification or withdrawal symptoms (e.g. Mirin, Meyer, and McNamee, 1976; Woody and Blaine, 1979; Dole and Nyswander, 1967) or the social stigma and disruptions caused by the need to maintain a habit (Zinberg, 1975).

Conflicting opinions exist regarding the relationship between opiate addiction and criminal activities. Some emphasise that criminal activities are necessitated by the high cost of keeping up a drug habit (Joseph and Dole, 1970; Dupont, 1972) and that criminal activity of various kinds rises with addiction (Biernackie, 1973) and falls with commencement of treatment (Joseph and Dole, 1970). In contrast, some researchers claim that delinquent behaviour and deviance are associated with initiation into illicit drug use (Kandel, Kessler, and Marguiles, 1978; Kandel, 1978) that many drug addicts were criminals before becoming addicted to drugs (Lukoff, 1974) and that maintenance on drugs is not associated with the elimination of high rates of criminal activities (Hawks, 1974).

Thus, association between drug addiction and psychophathology has a long history with many divergent opinions. The mere fact that there is such a vast array of divergent opinions suggests that there is no archetypal 'junkie' displaying psychopathic

traits. In the light of the vast number of studies examining the personality of the 'addict' coupled with the media's persistent sensationalization of drug addiction, it is not surprising that extreme stereotypic images of 'dangerous' heroin addicts exist today.

It is well documented that, if forced to resort to criminal activities, drug users are typically non-violent and non-assaultive (Task Force Report, 1967) and that interpersonally, they appear quite non-aggressive, passive, dependent, conservative (Campbell, 1962; Ausabel, 1958). Furthermore, field studies find the social and physical communities of addicts are not transient and non-structured, as might be expected, with strictly dangerous criminal individuals, but have a high degree of structure, interdependence and residential stability,(Schuman, Caffrey and Hughes, 1970). Research from Strathclyde University (1984-87) revealed that there exists a sizable number of 'stable' drug users who hold down full time jobs and have never been involved in any criminal activity. People take drugs for many reasons and often the reasons are rational decisions made by them to serve some pychological function. The stereotype of the 'junkie' must be one of the most misleading and dangerous stereotypes that exists. It is misleading in that - like all stereotypes - it is not true. It is dangerous because it is entrenched in society and may serve to fuel rather than combat

today's drug problem.

On examination of the comparisons between the four groups' perceptions of the heroin addict (Tables 6 and 7), it is apparent that this hostility towards heroin users arises from the three non-heroin using groups. Whilst these three groups perceive him/her as being dangerous and unassertive, the heroin users perceive him/her as being harmless but assertive. This conflict of opinion suggests that the reactions of the respondents towards heroin users probably reflects a publically held stereotype of heroin users that is reinforced by criminal role expectancy and mis-interpretation by the media rather than representing impressions gained from direct personal contact.

Some confirmation of the suggestion that people hold a misinformed stereotype of heroin users as a result of lack of personal contact is obtained from the 'photo' condition. It is apparent that merely accompaning the concept 'heroin addict' with a photograph of a supposed heroin user changes the 'dangerous, unassertive heroin addict' into a socially conforming person.

These findings support the contention of many researchers (e.g. Locksay, Hepburn, and Ortiz, 1982) that specific information about a stimulus person

should have greater impact on subjects' judgements than information about their category membership. On the basis of the findings from the present study, people are likely to perceive heroin users as being dangerous when requested to rate the label. However, when a photograph of a supposed heroin user accompanies the label it is more difficult to identify a dangerousness factor. Given only a label, subjects appear to infer a variety of unfavourable characteristics. Given more specific information, i.e. a label plus a photograph, the influence of the label diminishes and the resultant judgements based on inference are outweighed by physical appearance cues.

It is possible that the more tolerant view expressed by respondents towards heroin users in the 'no photo' condition was the result of greater contact with these groups through the medium of a photograph and that this contact had a modifying effect on their opinions. Some support for this contention has been reported by earlier studies. For example, Levitt, Bagnaz, and Blachly (1963) noted that direct contact with a discriminated against group resulted in greater lessening of cynical, rejecting and punitive views than did indirect contact.

On the basis of the results from Experiment 1, it appears that individuals hold extreme stereotyped conceptions of those labelled heroin addicts in the abstract and stigmatise the entire group. However,

this blanket of unfavourable qualities is more diffuse in the concrete individual case.

A word should be said about the instrument used in this study. It had been stressed (Warr and Hayycock, 1970) that the semantic differential technique should not be used as a standardised test, but as a flexible research technique. It should be said that, in this study, the instrument was used solely as a research technique employed to test people's perceptions of smokers, alcoholics and heroin addicts. As this study was purely a hypothesis-generating experiment, the results can only be interpreted with caution.

# CHAPTER FOUR

# 4. INTERPERSONAL-INTERGROUP BEHAVIOUR: REVIEW OF THE RELEVANT LITERATURE

## 4.1. Introduction

Experiment 1 demonstrated that heroin users are perceived as being dangerous. This stereotyped image, however, only emerged in the specific instance, i.e. in the 'no photo condition'. The question to be examined in this chapter is why individuals discriminated against heroin users in the 'no photo' condition but not in the 'photo' condition. It is particularily important to clarify which particular factors are important for producing such detrimental impressions of heroin users as obviously this has implications for many real life settings ranging from day-to-day interpersonal relationships to academic achievement, employment and mental health.

The thorny issue for psychologists who are interested in the development of stereotyping and the impact on its victims is whether there is any psychological difference between people's perceptions and behaviour in interpersonal settings, (i.e. those settings which do not raise explicitily or implicitly the notion of a group), and people's perceptions and behaviour in a collective setting, i.e. (those settings in which membership to a group is more

salient).

The aim the second experiment is to establish the conditions in which dealings between individuals will be determined, to a large extent, not by their personal relationship and individual characteristics, but by their membership of different social categories.

Before this question can be examined it is necessary to discuss some of the literature which is relevant to this issue.

## 4.2. Taifel's Interpersonal-Intergroup Continuum

Many researchers argue that it is necessary to elaborate on the basic difference between a social encounter which can be considered as being of an intergroup character and one which can be considered as being of the interpersonal type. Such a distinction is particularily necessary when considering the process of stereotyping and discrimination in social perception. The perception of individuals as members of social categories rather than individual personalities has a large part to play in the development of stereotyping, prejudice, and discrimination against minority groups.

From the empirical research to date it appears

that there are good empirical and conceptual reasons for believing that there is more to groups than a simple aggregate of individual members.

Tajfel (1978b; 1979) points out with reference to stereotypes, that the group is both a psychological process and a social product. He stresses the need to distinguish between interpersonal and intergroup behaviour. He defines intergroup behaviour in the same way as Sherif (1967, p12), "Whenever individuals belonging to one group interact collectively or individualy with another group or its members in terms of their group identification, we have an instance of intergroup behaviour". This type of interaction is contrasted with interpersonal behaviour and, in their pure forms, Tajfel considers that these differences can be conceived as lying at the extreme ends of a bi-polar continium, one extreme of which can be described as purely 'interpersonal' and the other as purely 'intergroup'. All other instances of social behaviour can be placed along this continuum between the two extremes.

What is meant by 'purely' interpersonal behaviour is any social encounter between two or more people in which the nature of the interaction that takes place is determined by the personal relationships between the two individuals and by their respective individual characteristics. The 'intergroup' extreme is that in which all the behaviours of two or more individuals

toward each other are determined by their membership of different social groups or categories.

Tajfel acknowledges that these theoretical extremes are probably seldom achieved in reality. It is impossible to imagine a social encounter which will not be affected, at least to some minimal degree, by their mutual assignments of one another to a variety of social categories about which some general expectations concerning their characteristics and behaviour exist in the mind of the interactants. However, some examples which come close to the interpersonal end of the continuum is the intimate conversation between husband and wife. In this case the husband and wife are unlikely to interact with each other as representatives of different groups. The other extreme of 'pure' intergroup behaviour is less empirically absurd in the sense that fairly clear examples of it can be found in real life situations. For example, the conflicts between police and strikers in a picket line, or a battle waged by soldiers of opposing armies out of sight of each other. The social categories to which the individuals belong are likely to be overwhelmingly important in determining their relations. The moment, however, the soldiers came to be able to distinguish individual specimens amongst their opponents, some aspects of their behaviour may be affected by some individual chatacteristics.

We have, therefore, a continuum which goes from the probably fictious extreme of 'pure' interpersonal behaviour to the rarely encountered extreme of 'purely' intergroup behaviour. All social situations fall between the two extremes, and the behaviour toward people who are categorized as members of the ingroup or the outgroup will be crucially affected by the individual's perception of the situation as being nearer to one or the other extreme.

Tajfel proposes three empirical characteristics of a social encounter which tend to define it as lying toward the intergroup pole of the continuum (and by implication, therefore, their absence, or opposites, define the interpersonal pole). The first and most basic is the presence of at least a dichotomous social categorization so that individuals are identified as members of distinct social categories e.g. heroin user, non-heroin user etc. The second is that intergroup behaviour typically shows low intersubject variability within each group, despite a normal range of individual differences on other variables i.e. group of members tend to behave in a homogeneous way, e.g all the members take heroin. The third characteristic is that there is usually low intrasubject variablility in the treatment and perception of different outgroup members, again despite an actual diversity in their physical and personal attributes, i.e. they are percieved as an

outgroup.

These characterisitcs are perhaps best exemplified at the level of social perception in the process of stereotyping - the agreement among members of a group that a particular cluster of attributes or adjectives describe all members of a human classification - Sherif, 1967, p33, - and in this from are well documented in the areas of ethnic, class and sex relations. (See Ehrlich, 1973).

## 4.3. Perception of Self and Others

To explain variation along Tajfel's continuum, Turner (1982), Tajfel and Turner (1979) have proposed a 'self-stereotyping' hypothesis. According to Turner, the self-concept is a cognitive structure which comprises a personal identity and a social identity. The former refers to personal idiosycratic attributes and the latter denotes self-definition in terms of social categories. Different situations bring different self conceptions into salience and these are used to regulate behaviour appropriate to that situation. According to this idea, the transition in self concept from personal to social identity corresponds to and is responsible for a shift from interpersonal to intergroup behaviour.

The basic feature of this transition process is

that it is controlled by a person's perception of self and others in terms of their social category membership. Once some specific social identification is made salient a person assigns to self and others the representative characteristics that define their group as a whole, (those stereotypical attributes which are perceived to correlate with their accentuation of similarities between individuals in the same group and differences between those belonging to different groups).

Thus, the special cognitive output of social identification is stereotypic perception. Individuals stereotype themselves as well as others in terms of their common attributes as group members, and this may include not only personalilty traits, but also social attitudes, needs, motives, goals and perhaps emotional states. Not only do individuals see outgroup members as homogeneous, but in the same way they perceive themselves as relatively interchangeable with other group members. Turner refers to this process as 'depersonalization'. Depersonalization on appropraite dimensions, he argues, can explain some common features of intragroup and intergroup relations. In each case the crucial process is that individuals react to themselves and others not only as differential individuals, but as exemplars of the common characteristics of their group.

Psychological depersonalization acccording to

this theory is the distinctive property of both intergroup and intragroup relations. Under conditions where a shared social identity becomes salient social behaviour tends to become more uniform both within the ingroup and towards the outgroup (in line with Tajfel's empirical criteria for intergroup behaviour).

Another distinction made by Tajfel and Turner (1979) between interpersonal and intergroup behaviour is that, not only do they have special empirical characteristics, but also they are controlled by different psychological processes. The three characterisitcs described by Tajfel provide empirical criteria for the tentative evaluation of specific social encounters as intergroup or not, but the fundamental criterion is whether the encounter is actually being determined by the interactors' different category membership. Empirically, the issue is whether the participants seem to be interacting in terms of their distinctive personal characteristics or their shared group attributes. If the encounter seems to indicate shared uniformities in attitudes and behaviour extending beyond the specific persons and related to their group membership, then it is probably intergroup.

This is an important issue because, whether encounters are interpersonal or intergroup is frequently ambigious. Some instances are easy to

characterise on both empirical and intuitive grounds. But interactions between just two people pose problems. Such instances are ambigious and the type of interaction depends on the salience of their social identification.

Turner (1978); Brown and Deschamps (1980) illustrate that social behaviour varies with the salience of group membership. In a situation where group salience was obvious, subjects distributed points or sums of money to their own group. When the salience of group membership was varied subjects' behaviour changed accordingly. When conditions de-emphasized group membership, self-favouritism was observed irrespective of the affiliation of the other recipients. But when group membership was made more salient, self-favouritism decreased. These findings lend support to Turner's self-stereotyping hypothesis.

## 4.4. Factors Which Influence the Salience of Social Identity

Unfortunately, to date, research does not permit a systematic theoretical delineation of the conditions under which social identity becomes salient. Nevertheless, some important factors have been identified. For example, group membership seems to become more salient in a conflict situation, or encounter with an outgroup (Dion, Earn and Yee, 1978; Doise, 1978; Sherif, 1967). Salience is also affected

by the distinctiveness of the group in a given environment (Bruner and Perlmulter, 1957; McGuire and Padawer-Singer, 1976), by the number of group members present (Doise, 1978), by factors which emphasise intragroup uniformities (Brown and Deschamps, 1980; Wilder, 1978), and by variables which can act as criteria for common category membership or perceived social entity (Campbell, 1958), such as similarity, proximity or common fate. Additional factors which may be important are whether or not individuals are acting as group representatives (White, 1977) and the relevance of the setting or the behaviour to important group norms (Boyanowsky and Allan, 1973; Minard, 1952).

Furthermore, it seem likely that the same characteristics which symptomize intergroup behaviour (such as social categories intragroup behaviour and perceived homogenity of outgroup members) also function as cues to others to define and react to the setting in intergroup terms. They may sometimes function as criteria for the participants themselves so as to play a circular cause-as-well-as-effect role in shifting social behaviour along the interpersonal-intergroup continium. There is still a long way to go before we understand precisely when the factors described above are operative and how and when they might interact with one another.

There is some evidence that the interpersonal-intergroup distinction does have some reality. For example, it has been consistently observed that groups are more competitive than individuals under the same conditions (Wilson and Kayatani, 1968; Doise and Weinberger, 1973. (cited in Turner, 1981)). In a study comparing individual and group aggression, marked differences between individual and collective settings were reported (Yaffe and Yinon, 1979).

Finally, in a series of three experiments by Wilder (1978) it was found that if an outgroup member was seen as a single unity there was always less discrimination against the individual than if uniformity was perceived. In Tajfel's terms, the condition which 'individuated' the outgroup member shifted the situation towards the interpersonal pole, with corresponding behaviour.

# CHAPTER FIVE

# 5. EXPERIMENT 11: TESTING THE LOWER LIMITS OF STEREOTYPING HEROIN USERS AS BEING DANGEROUS

## 5.1 Introduction

The previous chapter briefly outlined Tajfel's Interpersonal-Intergroup continuum. The findings from Experiment 1 will be discussed within the context of this continuum.

The interpretation given to the findings from Experiment 1 is that (following Tajfel) the interaction between the rater and the hypothetical heroin user in the no photo condition was intergroup in nature. That is, in the absence of a photograph the social identification of the heroin user was made in terms of his/her group identification. Consequently, the rater assigned to self and others the representative characterisitcs that define their group as a whole. According to Tajfel, (see previous chapter) the closer a social encounter is to the intergroup pole of this continuum, the stronger the tendency will be for members of the ingroup to treat members of the outgroup as undifferentiated items in a unified social category. This will be reflected simultaneously in a clear awareness of the ingroup-outgroup dichotomy. In the attribution to members of the outgroup, certain traits are assumed to be common

to the group as a whole. It is through this process of depersonalization that salient social identification helps to regulate social behaviour by causing group members to act in terms of shared norms which they assign to themselves and through the perceptual homogenization of others which elicits uniform reactions from the perceivers. The photo condition, however, provided information which personalized outgroup members so that they could be perceived as being differentiated persons rather than anonymous outgroup members. Also, the photo condition covered a range of class, age, and sex types. This type of interaction is close to the interpersonal pole of Tajfel's continuum. In such an interaction individuals belonging to one group interact with an individual, not in terms of their group membership, but in terms of their individual personalities.

One purpose of the present series of studies is to test the 'depersonalization' hypothesis in regard to people's perceptions of heroin users. One way to test this hypothesis is to manipulate the intergroup situation so that the heroin user is perceived, not in terms of an aggregate of individuals, but rather as a personalized single entity. If discrimination is mediated through the perception of the heroin user as a deindividuated unit, then personalization of the heroin user member should ameliorate the bias.

In addition, the present series of experiments seeks to go one step further than testing the lower limits of stereotyping heroin users. These studies also seek to determine the extent to which value differentials play a role in discrimination against heroin users.

As was stated in chapter 2, values not only play a role in the assignment to social categories, but also in preserving and enhancing the clarity and distinctiveness of existing social categories. For a number of reasons the term 'heroin addict' has become a value loaded term. John Rex (1969) identified the kinds of social situations in which value loaded notions tend to be used:

"(1). The situation of culture contact between peoples with an advanced industrial and military technology, and hunters, pastoralists and agriculturalists at lower levels of development.

(2). The situation on a slave plantation.

(3). Class situations in the classic Marxist and Weberian sense in which men within the same society have different degrees of market power.

(4). Status situations in which there is a concept of higher and lower.

(5). Situations of ethnic pluralism in which groups with differing cultures and/or physical characteristics work together in the same economy but retain their social and cultural identity.

(6). Situations in which a minority group occupies a

pariah or scapegoate role." (Rex, 1969, p 147).

Situation 6 is of importance to this study. The term 'heroin addict' has become an expression which creates, enhances and perpetuates perceived differences in 'worth' between groups. This is evident from Experiment 1. Wherever possible, differentiation in terms of values will increase the dichotomous distinctiveness of social categories.

## 5.2. Experiment 11: Part 1 - Modification of the Rokeach Value Survey Questionnaire

In order to determine the extent to which value systems play a role in the stereotyping of, and discrimination against, heroin users it is first of all necessary to determine whether there is any dissimilarity between heroin users and non-substance users in terms of value systems. The instrument used to obtain the value system norms for the two groups was the Value Survey Questionnaire (Rokeach, 1973). The Value Survey Questionnaire was designed as an all-purpose instrument for research on human values. (cf Rokeach, 1973 for details of the development and use of the Value Survey Questionnaire).

A small pilot study, conducted on seven current heroin users, however, revealed that the questionnaire, as it stood, was inappropriate for the

present samples under investigation. The reason for this may have been because it was compiled, to a large extent, in America. It was therefore decided that some changes to the original questionnaire would be necessary. It was also found the the traditional 'ranking of values in order of importance' method was too long and subjects usually gave up before completing the questionnaire. Conseqently, the value items were incorporated into a 7-point interval scale ranging from 0, 'not important at all' to 7, 'very important'. Because statistical comparisons are being made across individuals it was felt that this method of measuring values would satisfy the assumption of complete independence with individuals.

The traditional and the modified versions of the Value Survey Questionnaire are presented on the following pages.

**The Traditional Version of the Rokeach Value Survey Questionnaire.**

On the next page are 18 values listed in alphabetical order. Please arrange them in order of importance to YOU, as guiding principles in YOUR life.

1. A comfortable life
   (a prosperous life)

2. An exciting life
   (a stimulating, active life)

3. A sense of accomplishment
   (lasting contribution)

4. A world at peace
   (free from war and conflict)

5. A world of beauty
   (beauty of nature and the arts)

6. Equality
   (brotherhood, equal opportunity for all)

7. Family security
   (taking care of loved ones)

8. Freedom
   (independence, free choice)

9. Happiness
   (contentedness)

10. Inner harmony
    (freedom form inner conflict)

11. Mature love
    (sexual and spiritual intimacy)

12. National security
    (protection from attack)

13. Pleasure
    (an enjoyable, leisurely life)

14. Salvation
    (saved, eternal life)

15. Self-respect
    (self-esteem)

16. Social recognition
    (respect, admiration)

17. True friendship
    (close companionship)

18. Wisdom
    (a mature understanding of life)

**The Modified Version of the Rokeach Value Survey Questionnaire.**

In the following questionnaire there are 17 questions. Each question is followed by an answering scale. What we would like you to do is to circle on the scale a number which corresponds to how much or how little you value the statement underlined.

1. How important is it for you to be <u>well off financially?</u>
2. How important is it for you to lead an <u>exciting or stimulating life?</u>
3. How important for you is a <u>feeling of achievement</u> in your life?
4. How important is it for you to live in a <u>world free from war and conflict?</u>
5. How important is it for you to live in a <u>beautiful world where nature and the environment are valued?</u>
6. How important for you is <u>equal opportunity for everyone?</u>
7. How important is it for you to be <u>independent and have free choice?</u>
8. How important is it for you to be <u>physically and mentally well?</u>
9. How important for you is <u>self respect?</u>

10. How important is it for you to have a greater understanding of life?

11. How important for you is true friendship?

12. How important is it for you to be part of a caring group or family?

13. How important for you is a meaning and loving relationship?

14. How important for you is an enjoyable leisurely life?

15. How important is it for you to be respected or admired by other people?

16. How important for you is salvation and eternal life?

17. How important is it for you to feel happy in life?

## 5.3. Results

To ensure that the modifications made to the questionnaire did not attenuate its reliability, a test-retest study was carried out on 15 postgraduate students from various departments of Strathclyde University. The sample consisted of 8 males and 15 females with a mean age of 26.2 years. The delay period between the test-retest was 10 days.

The results of this reliability study are presented in Table 8 below:

Table 8: Product Moment Correlation Between Time 1 and Time 2 of the Modified Version of Value Survey Questionnaire.

| | Time 1 | Time 2 |
|---|---|---|
| Mean Score | 87.66 | 88.08 |
| S. Dev. | 9.56 | 8.56 |

$r = 0.67$, $p<0.01$ (one tailed). $N = 15$

From Table 8 it can be seen that the adjusted format of the Values Survey Questionnaire is reliable and was therefore used for obtaining a measure of value norms for heroin users and non-heroin users.

# CHAPTER SIX

# 6. EXPERIMENT 11: PART 11 - OBTAINING A MEASURE OF VALUE NORM FOR HEROIN USERS AND NON-HEROIN USERS

## 6.1. Introduction

The results from Experiment 1, 'no photo' condition clearly showed that heroin users are stereotyped as being dangerous. It was suggested in chapter 5 that one reason for the non-heroin using sample to view the heroin users in such a negative way was because he/she was identified in terms of his/her group membership as opposed to an individualized entity. This resulted in the attribution to the heroin user of certain traits assumed to be common to heroin users in society as a whole, in value judgements pertaining to these traits, and in the emotional significance associated with these evaluations. In addition to this 'depersonalization' hypothesis, it was also suggested that value differential played a significant role in this stereotyping process.

Although the results from Experiment 1 lend some support to the 'depersonalization' hypothesis, in that the 'dangerousness' dimension did not emerge in the photo condition, no light was shed on whether the value differential phenomenon was in operation. However, if one considers the persistently biased coverage drug use receives from the popular press and the media, it would be a fair assumption to make that

value differentials played some part in influencing subjects' judgements in the 'no photo' condition (that heroin users are dangerous).

The lay public have attitudes, beliefs and expectations towards illicit drugs. The rationale underlying the public's concern about drugs and drug use is far from clear. Concern for health, safety, and development of children and youths and fear of the hazards and dangers of drugs may be their sole aim; therefore, as responsible citizens, the public must take action and wage war on illicit drugs. However, it cannot go unmentioned that the lay public may derive as much from the fear of social change as from real life concerns for health and safety of the youthful drug user. Their drug use may challenge the existing value system. People using drugs may articulate values that contradict many of the dominant beliefs about life and the place of drugs in society.

Whatever the truth of this matter, it would be fair to say that non-drug users are emotionally and morally committed to their attitudes about drugs and drug use and, for the most part, identify strongly with others who have similar beliefs and values (Gertz, 1964) and discriminate against those who do not.

To summarize what has been said thus far, the results from Experiment 1 suggest that, in the absence of a photograph, the hypothetical heroin user was perceived as being an undifferentiated member of an outgroup and was attributed characteristics which are assumed to define that group as a whole. It is also suggested that value differentials played a significant role in influencing subjects judgements. The aim of the next two studies is to test this assumption. The following experiment will determine, firstly, whether a dissimilarity exists between heroin users and non-heroin users in terms of their value systems.

## 6.2. Method

Design. A between subjects design was used to obtain a measure of value norms from two different groups.

Subjects. The non-heroin using sample was obtained from the electoral register. In order to ensure that the measure of value systems obtained would be representative of non-substance users as a whole, five small geographical areas from within Glasgow were selected which covered all social classes. The geographical areas chosen were:- Easterhouse, Bridgeton, Bearsden, Newton Mearns, Pollokshields. Streets were selected on a random basis from each of these geographical areas which were

used as the source for obtaining subjects. Every door in the selected streets was approached until the required number of subjects was obtained.

The heroin using sample consisted of current heroin users and was obtained through various clinics and treatment centres in and around Glasgow. The clinics and treatment centres used were:- Cardross, Ecoda, and Possil Drug Line. Again, due to the difficulty in obtaining heroin users, it was more difficult to obtain an even coverage of all social classes in this group. From Table 10 it can be seen that there is a slight preponderance of social classes IV and V. It is also the case that the heroin using sample contained a higher percentage of unemployed than the non-heroin using sample.

Table 9 gives a detailed description of the two populations.

Table 9: Classification of Subjects by Group, Age, Sex, Social Class, and Employment Status.

Non-Heroin Users:

Mean Age: 41.1 years

Sex: 67.2% male, 32.8% female

Social Class: 1&2, 30.6%; 3, 40.4%; 4&5, 29%

Employment Status: 67.9% employed, 32.1% unemployed

(N=58)

Heroin Users:

Mean Age: 22.1 years

Sex: 74.5% male, 25.5% female

Social Class: 1&2, 10.6%; 3, 40.5%; 4&5, 48.9%

Employment Status: 22% employed, 78% unemployed

(N=47)

Material. The instrument used in this study was the modified version of the Rokeach Value Questionnaire (see chapter 5).

Procedure. All subjects were informed that the study was concerned with the problem of addiction. Specifically, whether people with addiction problems differed in certain ways from those who did not have an addiction problem. They were informed that this particular study was interested in determining where there was any difference between the two groups in terms of value systems. It was stessed to the non-heroin using sample that the study was only interested in obtaining a measure of values from those people who did not use illicit drugs, and who drank and smoked cigarettes occassionally. Non-heroin users completed the values questionnaire in their own home. Subjects who were interested in completing the questionnaire but were unable to do so at the time were left written instructions and a stamped addressed envelope and requested to return the completed version to the university. Heroin users completed the questionnaire at the clinic or centre they were contacted. The

questionnaire took approximately 15 minutes to complete. Subjects did not have to put their name on the questionnaire therefore anonymity was assured.

## 6.3. Results

In order to determine whether there was a difference between the two groups' value systems a t-test (independent design) was carried out on each individual value for all subjects. The results of this analysis is presented in Table 10 below:

Table 10: T-Test (Independent Design) Between Individual Value Items of the Heroin-Using Group and the Non-Heroin Using Group.

| | | mean | sd | t | 2 tailed prob | |
|---|---|---|---|---|---|---|
| Value 1 | gp 1 | 6.17 | 0.99 | | | |
| | | | | 1.99 | 0.050 | * |
| | 2 | 5.68 | 1.53 | | | |
| Value 2 | gp 1 | 5.14 | 1.33 | | | |
| | | | | -1.21 | 0.228 | |
| | 2 | 4.78 | 1.79 | | | |
| Value 3 | gp 1 | 5.61 | 1.23 | | | |
| | | | | 1.78 | 0.079 | |
| | 2 | 5.08 | 1.80 | | | |
| Value 4 | gp 1 | 5.74 | 1.50 | | | |
| | | | | 2.02 | 0.046 | * |
| | 2 | 5.06 | 1.98 | | | |
| Value 5 | gp 1 | 5.35 | 1.43 | | | |
| | | | | 2.84 | 0.006 | * |
| | 2 | 4.51 | 1.71 | | | |
| Value 6 | gp 1 | 5.42 | 1.50 | | | |
| | | | | 1.93 | 0.057 | * (SEE FOOTNOTE OVER) |
| | 2 | 4.76 | 2.01 | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Value | 7 | gp 1 | 5.98 | 1.12 | | | |
| | | | | | 0.38 | 0.703 | |
| | | 2 | 5.89 | 1.43 | | | |
| Value | 8 | gp 1 | 6.66 | 0.59 | | | |
| | | | | | 2.25 | 0.028 | * |
| | | 2 | 6.27 | 1.09 | | | |

(Table 10 continued)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Value | 9 | gp 1 | 6.20 | 0.91 | | | |
| | | | | | 2.13 | 0.037 | * |
| | | 2 | 5.72 | 1.37 | | | |
| Value | 10 | gp 1 | 5.08 | 1.31 | | | |
| | | | | | -0.06 | 0.953 | |
| | | 2 | 5.10 | 1.63 | | | |
| Value | 11 | gp 1 | 5.89 | 1.28 | | | |
| | | | | | -.26 | 0.796 | |
| | | 2 | 5.95 | 1.23 | | | |
| Value | 12 | gp 1 | 4.78 | 1.14 | | | |
| | | | | | 1.19 | 0.272 | |
| | | 2 | 4.24 | 1.92 | | | |
| Value | 13 | gp 1 | 5.47 | 1.80 | | | |
| | | | | | 0.02 | 0.984 | |
| | | 2 | 5.46 | 1.53 | | | |
| Value | 14 | gp 1 | 5.25 | 1.38 | | | |
| | | | | | -0.16 | 0.876 | |
| | | 2 | 5.29 | 1.47 | | | |
| Value | 15 | gp 1 | 4.80 | 1.62 | | | |
| | | | | | 0.39 | 0.711 | |
| | | 2 | 4.68 | 1.97 | | | |
| Value | 16 | gp 1 | 3.96 | 2.15 | | | |
| | | | | | 2.26 | 0.024 | * |
| | | 2 | 3.08 | 2.00 | | | |
| Value | 17 | gp 1 | 6.33 | 1.00 | | | |
| | | | | | 0.07 | 0.946 | |
| | | 2 | 6.31 | 1.20 | | | |

Group 1 = non-heroin using group.

Group 2 = heroin using group.

Footnote: Value 6 included because it almost reached 0.05 level of significance.

It is evident from Table 10 above that there is a discrepancy between the two groups in values 1, 4, 5, 6, 8, 9, and 16. Table 11 below presents a summary of these 7 values which significantly discriminate between the 2 groups.

Table 11: Summary of the Values Which Discriminate Between Heroin Users and Non-Heroin Users.

1. How important is it for you to be well off financially?

4. How important is it for you to live in a world free from war and conflict?

5. How important is it for you to live in a beautiful world (where nature and the environment are valued?)

6. How important for you is equal opportunity for everyone?

8. How important is it for you to be physically and mentally well?

9. How important for you is self respect?

16. How important for you is salvation and eternal life?

## 6.4. Discussion

From the results of this comparison between heroin users and non-heroin users in terms of value systems, it is clear that heroin users can be described as having a value system that is different

in important respects from non-heroin users. The latter group place greater importance on egalitarianism, world peace, salvation, aesthetic values, and the welfare of others. They also value their self-respect and their physical and mental health more than the heroin using group and place a higher value on materialistic items.

In contrast, evident in the value patterns of heroin users is that physical and mental wellbeing are not two of their most cherished values. Neither is self-respect. These findings suggest that the life style of the majority of heroin users results in their valuing their physical and mental health less than non-heroin users. Heroin users are less concerned with the traditional values of God, material success, peace, and the environment. Also they are less concerned with the welfare of their fellow men.

The value differences between heroin users and non-heroin users suggests a somewhat different set of dynamics operate within these two groups. Overall, heroin users appear to be less concerned with the material things in life and appear to have less concern for their fellow men than non-heroin users. Without additional information it would be premature to speculate about the meaning of these differences or whether the value pattern that heroin users exihit is a consequence of their 'addiction'. It is not the aim of this study to expand on these findings. They will

be used in the following experiment to determine the role played by value systems in the process of stereotyping. However, the findings are interesting and invite further research.

# CHAPTER SEVEN

# 7. EXPERIMENT 11: PART 111 - TESTING THE 'DEPERSONALIZATION' HYPOTHESIS AND THE ROLE OF VALUE DIFFERENTIALS IN THE STEREOTYPING OF HEROIN USERS

## 7.1. Introduction

The previous experiment demonstrated that heroin users differ to a significant degree from non-heroin users in terms of their value systems. These findings lend some support to the claim made in the previous chapter that value differentials may have played some role in influencing the lay public's judgements about the personality of the heroin user.

Stereotyping of people, groups of people, and social events in terms of value differential is probably one of the most basic forms of social categorization. Values not only play a role in the formation of social categories, but more importantly, in the maintenance and preservation of existing social categories. Divisions of people into social categories which matter to the individual are usually associated with positive or negative evaluations of these categories. The value differentials tend to enhance still further (as compared with 'neutral' categorization) the subjective difference on certain dimensions between the categories and the subjective

similarities within the categories (e.g. Doise, 1978; Lilli, 1975 (cited in Tajfel, 1978b); Eiser and Stroebe, 1972).

It has been well recognised by social psychologists for some time that cognitve categories, once established, have a biasing and filtering effect on our perceptions. For G. Kelly (1955), every man is a 'scientist' interested in accurate prediction and control of future events. More recently, Snyder and his colleagues showed in a series of studies that our notion of man as a scientist and a 'hypothesis tester' is limited. According to the hypothesis-testing metaphor, 'individuals in the course of their quests for understanding of the events of their lives, are engaged in the systematic testing of hypotheses about the nature of their social worlds' (Snyder and Gangestad, 1981, p40). In fact, human beings appear to be strongly and consistently biased towards confirming rather than rejecting hypotheses about the social world. Normative biases operate in favour of the preservation and maintenance, rather than the change, of the existing systems of social categorizations.

This interaction between socially derived value differential on the one hand and the cognitive aspects of categorization on the other is particularly important in all social divisions between 'us' and 'them', - that is, all social categorizations in which

distinctions are made between the individual's own group and the outgroups which are compared or contrasted with it.

Experiment 11: Part 11 demonstrated that heroin users differ to a significant degree from non-heroin users on seven of the value items in the Value Survey Questionnaire. This information will be used in the following experiment to determine the role played by value differentials in the personality judgements of heroin users.

## 7.2. Hypothesis

From Experiment 1 it was demonstrated that heroin users are discriminated against, in comparison to, 'smokers' and 'alcoholics', i.e. they were perceived as an outgroup; and the stereotype applied to them was that they are dangerous. This discrimination against and stereotypic perception of heroin users, however, only occurred in the 'no photo' condition. It is believed that this discrimination occurred because the raters percieved the heroin user in the 'no photo' condition as being depersonalized, but that value differentials played a part in accentuating this discrimination. It is therefore hypothisized that (a) the more personalized the heroin user is the less likely that he/she will be a target for unfavourable judgements; (b) the more like non-heroin users the

heroin user is in terms of value systems, the more the threshold for bestowing unfavourable judgements will be raised; and (c) in some instances both of these variables will interact and influence personality judgements perhaps to an even greater degree.

## 7.3. Method

One way to test the 'depersonalization' and the value dissimilarity hypotheses would involve manipulating an intergroup encounter so that the heroin user is perceived, not in terms of an aggregate of individuals, but as a single entity with a similar value system to that of non-heroin user. If discrimination is mediated through the perception of the heroin user as a depersonalized unit and enhanced by the belief in value differentials, personalization and percieved value similarity should lessen the discrimination.

Material. Manipulation of the intergroup encounter so that the outgroup member (i.e. the heroin user) would range from intergroup to interpersonal was achieved in four stages. This was attained by constructing four scenarios each containing a hypothetical case of violent behaviour committed by a heroin user. The scenarios were constructed in such a way that each of the four contained differing amounts of personal information about the heroin user.

The same information regarding the age of the heroin user (25 years) was given in all conditions. The photograghs used in this experiment were selected from the set of photos used in Experiment 1 on the basis of the age of the photographee. To ensure that differences between subjects scores were not due to the gender and social class of the hypothetical heroin user, sex and social class variables were controlled. The photographs used are presented in Appendix 3.

In order to determine the role played by value differentials in the discrimination process, the seven value items (obtained in Experiment 11: Part 11) which discriminated between the heroin users and the non-heroin users were incorporated into these three scenarios in such a way that the heroin user also appeared to value these items.

A semantic differential scale followed each scenario. The scale was made up of the eight items which comprised factor 1 (the dangerousness factor) in Experiment 1. The items used were as follows:

Scruffy/Neat Appearance

Dangerous/Harmless

Placid/Aggressive

Menacing/Friendly

Cautious/Impulsive

Forceful/Mild

Depressed/Elated

It was decided to use the items from this factor because it was this factor which clearly discriminated heroin users from the other three groups in Experiment 1.

Experimental Design. The experiment consisted of two conditions: condition 1, Values, whereby values were incorporated into the the scenarios; condition 2, No Values, whereby values were omitted from the scenarios. Each condition contained four levels of personal information regarding the family background of the heroin user ranging from level 1, no personal information, level 2, some personal information, level 3, a lot of personal information, level 4, a lot of personal information plus a photogragh of a supposed heroin user. In a study such as this it is important to avoid alerting subjects to the main purpose of the investigation. To achieve this the experiment used a between-subjects-design. 192 subjects participated in the experiment; 96 subjects in each condition; 24 subjects in each level. This is not the same sample used in Experiment 1. Table 13 below contains a summary of the experimental design.

Table 12: Summary of the Experimental Design of Experiment 11: Part 111

**Condition 1, No Values**

Level 1: no personal information (N=24)

Level 2: some personal information (N=24)

Level 3: a lot of personal information (N=24)

Level 4: a lot of personal information plus photo (N=24)

**Condition 2, Values**

Level 1: no personal information (N=24)

Level 2: some personal information (N=24)

Level 3: a lot of personal information (N=24)

Level 4: a lot of personal informtion plus photo (N=24)

Total N=192

The three versions of the constructed scenarios with and without the value differentials are presented on the following pages.

**Scenario 1, no values.**

A young man (woman), on a visit to a pub which he (she) had never visited before, bumped into an old friend. The two men (women) sat talking about old times. After about an hour the conversation developed into a heated argument which resulted in the young man (woman) injuring his (her) friend.

The police were called and during the course of their investigations it was established that the young man (woman) was a regular user of heroin (i.e. he (she) used the drug every day) and had been for the past six years. His (her) friend had never used drugs at any time in his (her) life.

**Scenario 2, no values.**

A young man (woman), on a visit to a pub which he (she) had never visited before, bumped into an old friend. The two men (women) sat talking about old times. After about an hour the conversation developed into a heated argument which resulted in the young man (woman) injuring his (her) friend.

The police were called and during the course of their investigations it was established that the young man (woman) was 25 years, married with two children and lived in Glasgow. It was also established that the young man (woman) was a regular user of heroin (i.e. he (she) used the drug every day) and had been for the past six years. His (her) friend had never used drugs at any time in his (her) life.

**Scenario 3, no values.**

On January 3rd 1985, James (Veronica) Pental, on a visit to a pub which he (she) had never visited before, bumped into an old friend. The two men (women) sat talking about old times. After about an hour the conversation developed into a heated argument which resulted in James (Veronica) injuring his (her) friend.

The police were called and during the course of their investigations it was established that James (Veronica) was 25 years old, married to a shop assistant (electrician) called Veronica (James) and had two children - Jason aged 3 years and Marie aged 5 years. He (she) lived with his (her) family on the outskirts of Glasgow. He (she) was a trained electrician (experienced shop assistant) but had been out of work for the past two years. It was also established that James (Veronica) was a regular user of heroin (i.e. he (she) used the drug every day) and had been for the past six years. His (her) friend had never used drugs at any time in his (her) life.

**Scenario 4, no values** was identical to scenario 3 but was accompanied by a photograph of a supposed heroin user.

**Scenario 1, values.**

A young man (woman), on a visit to a pub which he (she) had never visited before, bumped into an old friend. The two men (women) sat talking about old times. After about an hour the conversation developed into a heated argument which resulted in the young man (woman) injuring his (her) friend.

The police were called and during the course of their investigations it was established that the young man (woman) was a regular user of heroin (i.e. he (she) used the drug every day) and had been for the past six years. His (her) friend had never used drugs at any time in his (her) life.

In compiling a background report on the case it was revealed that the young man (woman) was a member of the Ecology Party and was against war of any kind. His (her) self respect was important to him (her) as was his (her) physical and mental health. He (she) valued the hope of being financially comfortable and felt strongly about equal opportunity for everyone. He (she) also valued his (her) beliefs in salvation and life after death.

**Scenario 2, values.**

A young man (woman), on a visit to a pub which he (she) had never visited before, bumped into an old friend. The two men (women) sat talking about old times. After about an hour the conversation developed into a heated argument which resulted in the young man (woman) injuring his (her) friend.

The police were called and during the course of their investigations it was established that the young man (woman) was 25 years old, married with two children and lived in Glasgow. It was also established that the young man (woman) was a regular user of heroin (i.e. he (she) used the drug every day) and had been for the past six years. His (her) friend had never used drugs at any time in his (her) life.

In compiling a background report on the case it was revealed that the young man (woman) was a member of the Ecology Party and was against war of any kind. His (her) self respect was important to him (her) as was his (her) physical and mental health. He (she) valued the hope of being financially comfortable and felt strongly about equal opportunity for everyone. He (she) also valued his (her) beliefs in salvation and life after death.

**Scenario 3, values.**

On January 3rd 1986, James (Veronica) Pental, on a visit to a pub which he (she) had never visited before, bumped into an old friend. The two men (women) sat talking about old times. After about an hour the conversation developed into a heated argument which resulted in James (Veronica) injuring his (her) friend.

The police were called in and during the course of their investigations it was established that James (Veronica) was 25 years old, married to a shop assistant (electrician) called Veronica (James) and had two children - Jason aged 3 years and Marie aged 5 years. He (she) lived with his (her) family on the ourskirts of Glasgow. He (she) was a trained electrician (experienced shop assistant) but had been out of work for the past two years. It was also established that James (Veronica) was a regular user of heroin (i.e. he (she) used the drug every day) and had been for the past six years. His (her) friend had never used drugs at any time in his (her) life.

In compiling a background report on the case it was revealed that James (Veronica) was a member of the Ecology Party and was against war of any kind. His (her) self respect was important to him (her) as

was his physical and mental health. He (she) valued the hope of being financially comfortable and felt strongly about equal opportunity for everyone. He also (she) valued his (her) beliefs in salvation and life after death.

**Scenario 4**, values was identical to scenario 3, values but was accompanied by a photograph of a supposed heroin user. An example of the questionnaire used in the present experiment is presented in Appendix 4.

Subjects. Since it was the non-heroin using groups which discriminated against heroin users in Experiment 1 (see Tables 6 and 7) it was decided to use non-heroin users in the present study. Subjects were selected from a section of the lay population. To ensure that the sample represented a cross-section of society, the electoral register was used as the source for subjects. The procedure for selection of subjects was similar to the procedure in Experiment 11: Part 11. The geographical areas chosen for this experiment were: Pollokshields, Bearsden, Castlemilk, Newton Mearns, Finnieston, and Denniston. Table 13 contains a detailed description of the subjects used in the two conditions.

Table 13: Detailed Description of the Subjects who Participated in the Two Conditions of Experiment 11: Part 111

No Values Group:

Mean Age, 43.2 years (range 18 to 75 years)

Sex: 51.2% male, 47.8% female

Social Class: 1&2, 32.3%; 3, 39.8%; 4&5, 27.9%

Employment Status: 71.8% employed, 17.7% unemployed,
10.5% retired

(N=96)

Values Group:

Mean Age: 39.8 years (range 18 to 69 years)

Sex: 42.7% male, 57.3% female

Social Class: 1&2, 38.6%; 3, 37.7%; 4&5, 23.7%

Employment Status: 69.7% employed, 27.1% unemployed,
3.2% retired

(N=96)

Procedure. Subjects were informed that the study was about how people form impressions of others from a description of an incident. They were told that they would be required to read through a short script describing an incident which happened between two people in a pub, and if they agreed, they were asked to read carefully through the script and then answer the series of questions which followed it. Subjects names were not required for this study therefore, anonymity was assured. The time taken to complete the questionnaire depended on the length of the script the particular subject had to read. On average the time taken was about 20 minutes. All subjects completed

the questionnaire in their own homes.

## 7.4. Results

Scoring of the data: the eight semantic differential items were scored in the following way:

| | | | | | | |
|---|---|---|---|---|---|---|
| Scruffy | | | | | | Neat Appearance |
| 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Dangerous | | | | | | Harmless |
| 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Placid | | | | | | Aggressive |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Menacing | | | | | | Friendly |
| 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Cautious | | | | | | Impulsive |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Forceful | | | | | | Mild |
| 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Depressed | | | | | | Elated |
| 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Uncultured | | | | | | Cultured |
| 7 | 6 | 5 | 4 | 3 | 2 | 1 |

A two way analysis of variance (level of information X condition) was carried out for the sum of the ratings of the semantic differential items for each scenario over each questionnaire. The results from these analyses are presented in Table 14 below.

Table 14: Two Way Analysis of Variance (Level of Information x Condition) for the Summed Product of the Eight Semantic Differential Items.

| Source of variation | Sum of squares | df | Mean square | F | sig |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| condition | 324.9 | 1 | 324.9 | 22.6 | 0.00 |
| level | 398.3 | 3 | 132.7 | 9.2 | 0.00 |
| interaction | 34.5 | 3 | 11.5 | 0.8 | 0.49 |

N=192

As can be seem from Table 14 above, there was a substantial effect due to the amount of personal information given about the heroin user and also for perceived similarity in value systems. There was, however, no significant interaction.

From these results it appears that both personalization of the outgroup member and perceived similarity in value systems in the outgroup member are worthy of further investigation.

In order to determine the effect these two variables had on the individual semantic differential items, an item-by-item series of two way analyses of variance (condition x level) was carried out. The results from these analyses are presented in Table 15 below.

Table 15: Two Way Analyses of Variance (Condition x Level) for the Individual Semantic Differential Items. (N=192)

| | Source of variance | sum of squares | df | mean square | f | sig |
|---|---|---|---|---|---|---|
| Item 1 | level | 4.87 | 3 | 1.62 | 9.4 | 0.001 |
| scruffy/ neat | condition | 1.92 | 1 | 1.92 | 11.1 | 0.001 |
| | interaction | 4.74 | 3 | 1.58 | 1.1 | 0.762 |
| Item 2 | level | 3.07 | 3 | 1.02 | 5.5 | 0.001 |
| dangerous/ harmless | condition | 1.29 | 1 | 1.29 | 6.9 | 0.009 |
| | interaction | 0.17 | 3 | 0.05 | 0.3 | 0.819 |
| Item 3 | level | 1.19 | 3 | 0.39 | 3.0 | 0.031 |
| placid/ aggressive | condition | 2.60 | 1 | 2.60 | 19.6 | 0.001 |
| | interaction | 0.82 | 3 | 0.30 | 2.3 | 0.076 |
| Item 4 | level | 4.09 | 3 | 1.36 | 10.5 | 0.001 |
| menacing/ friendly | condition | 0.68 | 1 | 0.68 | 5.3 | 0.022 |
| | interaction | 0.41 | 3 | 0.13 | 1.0 | 0.369 |
| Item 5 | level | 2.22 | 3 | 0.75 | 10.5 | 0.001 |
| cautious/ impulsive | condition | 0.38 | 1 | 0.38 | 5.3 | 0.022 |
| | interaction | 0.22 | 3 | 0.07 | 1.0 | 0.369 |
| Item 6 | level | 0.69 | 3 | 0.23 | 5.7 | 0.001 |
| forceful/ mild | condition | 0.21 | 1 | 0.21 | 5.2 | 0.022 |
| | interaction | 0.10 | 3 | 0.35 | 0.8 | 0.458 |
| Item 7 | level | 0.19 | 3 | 0.06 | 3.4 | 0.018 |
| depressed/ elated | condition | 0.00 | 1 | 0.05 | 0.0 | 0.920 |
| | interaction | 0.15 | 3 | 0.50 | 2.7 | 0.046 |
| Item 8 | level | 0.04 | 3 | 0.01 | 0.6 | 0.572 |
| Uncultured/ cultured | condition | 0.03 | 1 | 0.03 | 1.5 | 0.217 |
| | interaction | 0.05 | 3 | 0.01 | 0.7 | 0.535 |

Main effect of level of information. The main effect of level of information given demonstrated whether or not subjects discriminated in their judgements about the dangerousness of heroin users on the basis of information, irrespective of perceived similarity in value systems. The results indicate that there is a significant effect for this variable for items 1, scruffy/neat; 2, dangerous/harmless; 3, placid/aggressive; 4, menacing/friendly; 5, cautious/impulsive; 6, forceful/mild; and 7, depressed elated.

Main effect of condition. The main effect of perceived similarities in value systems demonstrated whether or not subjects discriminated in their judgements about the dangerousness of heroin users on the basis of value similarity, irrespective of the amount of personal information given. The results indicate there to be a significant effect for this variable for items 1, scruffy/neat; 2, dangerous/harmless; 3, placid/aggressive; 4, manacing/friendly; 5, cautious/impulsive; and 6, forceful/mild.

It therefore appears that both perceived similarity in value systems and amount of information play an important role in modifying people's judgements about the dangerousness of heroin users.

Interaction effect. The interaction term demonstrated the extent to which subjects' judgements were a function of both amount of personal information and the presence or absence of value items. The analysis of variance (as depicted in Table 15) yielded an interaction effect for item 7, depressed/elated.

Evaluations for item 8, uncultured/cultured, was not influenced by any of the above variables and yielded a non-significant result.

In order to determine which of the two conditions overall was the most successful in modifying subjects' judgements of heroin users, a between-group-design t-test was carried out between conditions on subjects' total scores. Table 16 shows the results of this analysis.

Table 16: Results of the T-Test Between Condition 1, No Values, and Condition 2, Values.

| Condition | mean | sd | sum of errors | t | df | prob | n |
|---|---|---|---|---|---|---|---|
| No Values | 35.18 | 7.29 | 0.745 | | | | 96 |
| | | | | 4.34 | 190 | 0.00 | |
| Values | 30.63 | 7.20 | 0.735 | | | | 96 |

From Table 16 above it can be seen that there is a highly significant difference between the two

conditions. The scenarios which contained the value items were more successful (m=30.63) in modifying subjects' responses than the scenarios which did not contain the value items, (m=35.18).

In order to determine how successful each level of personal information was in influencing subjects' judgments a one-way-analysis of variance (condition x level of information), followed by a trend analysis, was carried out on subjects' scores. Table 17 shows the result of this analysis.

Table 17: Summary of Anova and Trend Analysis.

| Source | df | sum of sq | mean sq | f | f prob |
|---|---|---|---|---|---|
| between groups | 3 | 61.97 | 20.65 | 11.60 | 0.00 |
| linear term | 1 | 61.92 | 61.92 | 34.78 | 0.00 |
| deviations from linear | 2 | 0.051 | 0.250 | 0.01 | 0.98 |

From Table 17 it can be seen that almost all of the variation in this analysis was linear and there were no deviations from the straight line. Progression from level 1 to level 4 yielded data which decreased at a constant ratio.

## 7.5. Discussion

The present Experiment investigated the effects

of personalization and the role played by similarity in value systems in influencing the lay public's judgements of the personality of heroin users. The heroin user was personalized by presenting scenarios to subjects which manipulated the amount of personal information regarding his/her family background. A measure of the role played by value differentials in influencing judgements of heroin users was obtained by either incorporating or omitting the value items found in Experiment 11: Part 11 to discriminate between heroin users and non-heroin users.

Returning to the main hypothesis, that (a) the more personalized the heroin user is the less likely he/she will be a target for unfavourable judgements; and (b) the more like non-heroin users the heroin user is in terms of values, the threshold for bestowing unfavourable judgemnts will be even higher; and (c) in some instances, both of these variables will interact and influence personality judgements.

The first prediction - part (a) of the hypothesis, that the threshold for bestowing unfavourable judgements about the personality of heroin users is higher the more personalized the heroin user is - received strong support. Subjects judgements were less extreme in the experimental condition which yielded the most personal information accompanied with a photograph of a supposed heroin user. Evidence for this was found for both the sum of

the ratings of the eight semantic differential items (Table 14) and for seven of the individual items (Table 15).

The success of personalization plus a photograph of a supposed heroin user may be explained in the follwoing way: if persons respond differentially to members of different categories, then personalization of the outgroup member blurs the simple ingroup/outgroup dichotomy and consequently, lessens one's tendency to behave in a discriminatory way towards the outgroup. In support for this interpretation, the results from the trend analysis (Table 17) demonstrated that judgements were modified in a linear fashion, i.e. progression from level 1, minimal personal information, to level 4, maximum personal information plus a photograph, yielded scores which decreased in a linear fashion.

The second prediction was: the more like non-heroin users the heroin user is in terms of value systems the more the threshold for bestowing unfavourable judgements will be raised - received strong support. It can be seen from Table 14 that, like personalization, there is a highly significant main effect for perceived similarity in value systems between the two groups. From an inspection of the comparisons of the two conditions (Table 16) it can be seen that subjects responses were less negative in the

'values incorporated' conditon than in the 'values omitted' condition. Thus, the second prediction - part (b) of the hypothesis is well supported. The incorporation of values was more successful in influencing subjects' judgements.

The interpretation given to the effectiveness of perceived similarity in value systems is that, in such conditions value similarity (like personalization) decreases the group membership and encourages an interpersonal orientation. As in the case of personalization, the rater reacts to the hypothetical heroin user, not as a group representative, but as an individual. Perceived similarity in values operationalizes the heroin user's beliefs as their personal attributes - not as a shared effect of their common group membership. It appears that the importance of value similarity is that it is an effective determinant of interpersonal attraction. It may not be the case, however, that the heroin user's beliefs are not informative about all heroin users as a whole. In consequence, the heroin user may be liked without any corresponding change in feeling about all heroin users.

Support for part (c) of the hypothisis receives support for the item depressed/elated (Table 15). When the non-heroin users were given a lot of personal information about a hypothetical heroin user plus a photograph and perceived him/her as having a value

system similar to his/her own, the direction of influence was as predicted, favourable. The heroin user was rated as being less depressed.

One of the main processes operating in stereotyping and discriminatory behaviour towards an outgroup occurs because, in an intergroup encounter, individuals react to others, not as undifferentiated individual personalities but as exemplars of the assumed common characteristics of their group. This is often related to value differentials which enhance still further the subjective differences on certain dimensions between the two groups. In the condition which personalized the heroin user to the maximum degree and which 'forced' the non-heroin user to think that the heroin user held a value system which was similar to his/her own, judgements about the 'forcefulness' and 'unculturedness' of the heroin user were less extreme.

Overall, the results seem to support Tajfel's interpersonal-intergroup continuum and Turner's 'depersoanlization' hypothesis. Progression from minimal information, i.e. high salience of group membership (level 1) through to maxium personal information plus a photograph, i.e. low salience of group membership (level 4) yielded less extreme judgements.

The nature of contact between groups is one crucial determinant of how one group will view the other. While this is especially true of the initial contact between groups, contact continues to shape intergroup perception by modifying or reinforcing them. For most people, the initial (and sometimes the only) contact they have with heroin users is through the media. Normally, these channels portray the 'heroin addict' as socially distant, potentially harmful and frightening, untrustworthy and interpersonally aversive. This image is continually reinforced by hostile police attitudes and non-tolerant views expressed by some professionals in the field.

The consequences of this is that this set of defining features becomes associated together in semantic memory (Howard and Rothbart, 1980). Identifying a person by use of a group label facilitates access to the traits that are associated with the group label. If this other person is a stranger, it is likely that the person identified will be thought to possess the characteristics of a prototypical member of the group (Cantor and Mischel, 1979).

However, if the social perceiver is given the opportunity to perceive outgroup members at a personal level, it is more difficult for the perceiver to judge the outgroup member in accordance with the set of

defining characteristics assumed to be associated with the group.

# CHAPTER EIGHT

# 8. HEALTH EDUCATION

## 8.1. Introductory Remarks

Health education means many things to different people. Traditionally it has been mainly concerned with giving information and advice about factors which promote physical health such as fresh and clean air, hygiene, exercise, and nutrition. But increasingly, it has covered advice about mental health and such topics as drug education, sex education, marriage guidance, and family and social problems which may play a large part in determining health or disease. In this wider sense there is hardly any aspect of life which can be excluded from the ambit of health education.

Health education is not a subject or discipline in the traditional sense. (It is not analogous to Mathematics, English, History etc.) The aims of health education can be defined in a number of ways: it is the educator's job to train people to be healthy; to impart knowledge which will help people to keep healthy: to inculcate attitudes seen by the educators as desirable; to foster a life-style consistent with good health: to develop healthy skills (such as breathing properly) and so forth.

As can be seen from above, health education has a jumble of aims of different sorts. Some are cognitive, some to do with training, and some are not educational at all but would be rather called indoctrinatory. As a result of the divergent aims of health education it is difficult to fix precise boundaries to it. Health education is regarded as being involved where the prime purpose of information or instruction is to promote mental or physical health. Basically the four major types of health education programmes are:

**Ministry of Health - Report on Health Education, 1974.**

(i) Advice about specific preventive measures, e.g., vaccination and immunisation, which require individual co-operation only on a limited number of occasions.

(ii) Education to understand the need for community-health measures and to support them, (e.g., clean air, good housing), and to make full yet responsible use of all available health services.

(iii) Education to seek advice from the doctor at an early stage of certain conditions. This involves the layman in making a distinction between occasions when he would be bothering the doctor unnecessarily, and occasions when there is a genuine need to seek advice early: some knowledge of symptoms is required before this distinction can be made. (iv) Education with a view to inculcating habits and attitudes which will promote health and prevent disease. The correct attitude or habit may require much knowledge and/or

self-discipline, e.g., refraining from smoking, drinking, drug taking, overeating, taking exercise, cleanliness etc. This kind of health education faces many difficulties.

Whatever the aim of the health educator, the primary goal is the prevention and cure of damage to the human body. To live longer we have to do various things. The health educator must do more than provide information. He/she must seek to persuade people to respond to health education measures and to counteract anti-health pressures, notably those which invest particular products or habits with meretricious glamour.

Health education involves effective communication. The process of preventing or curing requires one to influence people's actions by getting them to use seat belts; stop smoking, taking drugs, drinking; seek medical examination, and so forth. Those in charge of health education programmes must decide, after taking the appropriate advice, which technique they will employ, according to the subject being dealt with and the audience to be reached.

There are many techniques available to promote health education, (a detailed discussion of these techniques is beyond the scope of this chapter), for example, through support from self-help groups,

families and friends; by talking to members of the medical profession; through legislation by enviornmental health officers; via posters; etc. (Tones and Davidson 1979).

## 8.2. The Mass Media as a Channel for Imparting Health Education.

One commonly used channel for imparting health education messages - which is worth more than a passing mention - is through the use of the mass media. Many millions of pounds are spent each year on media advertising (particularily in the area of drug use) with the belief that this method is an effective means of producing a desired change in health habits. This continues despite the recurring disquiet expressed by researchers regarding the effectiveness of such a channel for imparting information about health, (e.g. Tones and Davidson, 1979).

Tones (1981) argues that the belief in the superiority of the media approach to health education is due, in part, (a) to the 'supposed' effectiveness of promoting wartime propaganda, and (b) to the belief that the public's motivation to adopt a healthy way of life can be influenced and manipulated in a similar way to that of persuading them to buy a new washing machine, microwave cooker, oven ready meals, or whatever. He points out that such 'eye catching' imagery used in such salesmanship may indeed be

successful in increasing the sales of commercial products. But selling health is a fundamentally different issue.

In addition to the questionable efficacy of the mass media in the promotion of healthy living, there is the problem of factors which can mitigate against good health. These might be considered 'anti-health' or 'ill health' education. Tones refers to this as the 'incidental effect' i.e. the publicity associated with creating fear of illness, encouragement of self medication, or the discouragement of appropriate health practices. An example which springs to mind is reports by the media about the side effects of whooping cough vaccine. Such reports may result in parents deciding against having their child immunised - a decision which may turn out to be fatal.

A further incidental effect of the mass media approach pointed out by Tones (1981) stems from the practices of editors who use 'sensational headlines' in an attempt to increase circulation of their paper. This effect is very relevant to the topic of drug addiction. For example, 'Heroin Horror of Teenage Sweethearts: Dead in Each Other's Arms' (Daily Record, August 14th 1984), 'My Boy's as Good as Dead' (accompanied with a photograph of the young boy in question, Daily Record, April 15th 1984). As pointed out by Tones, such media effects may conspire to

sustain drug attraction attitudes that drug education programmes strive to eliminate.

In addition to the danger of the possibility of sustaining drug attraction attitudes, such headlines may in fact confuse the reader. It would not be uncommon for headlines such as the above to be followed on a subsequent page of the newspaper by some archetypal prevention message, e.g., 'Drugs Are For Mugs' (Strathclyde Regional Council Social Works Department, 1985), 'Heroin Screws You Up' (Department of Health and Social Security, Oct. 1986), 'Just Say No',(Easterhouse Committee On Drug Abuse), 'Refuse To Use' (S.H.E.G., 1986). All of these types of information are aimed at highlighting the possible dangers which can be associated with drug abuse. The former in the form of sensationalism the latter in the form of rules and proscriptions.

In spite of the above, it is widely assumed that drug education, in its various forms, as well as being extremely worthy, is extremely effective - effective meaning successful in changing attitudes and behaviours regarding the use of drugs. Kinder, Pape, and Walfish's 1980 review of the literature on the effectiveness of drug education programmes, however, reveals that, for the most part, past drugs education programmes have been ineffective in obtaining the goal of decreasing or preventing drug abuse.

## 8.3. Evaluation of Health Education

Measurements of the effectiveness and the efficiency of methods and media in health education is an internationally recognised need. The need for research in the methodology of health education, including evaluative studies of the effectiveness and use of various media, has been long recognised by WHO expert groups as well as by individual researchers.

In the first report of a WHO expert Committee of Health Education of the public it was stressed that until that time (1954) most methods and procedures in health education had been based on experiences in other fields and that, in the future, more attention should be paid to carefully planned field studies, research, and experimental programmes in health education. The need for more and better research in health education has been raised time and time again in various WHO documents and on various occasions (Wld Hlth Org. Techn. Rep. Ser., 1958, No 156; Wld Hlth Org. Techn. Rep. Ser., 1964, No 278; Wld Hlth Org. Techn. Rep. Ser., 1969, No 409) until the WHO scientific group on research in health education (WHO Hlth Org. Techn. Rep. Ser., 1969, No 432, p15) suggested ten main categories of research in health education. Category eight included 'studies of the comparative effectiveness of various educational methods; of the communication process; of the channels

and media of communiation; and the relative effectiveness of each of these as components of programmes in general public health, specific school health, or various education and training programmes'.

The need for evaluative research in health education is also stressed in two documents of the Regional Office for Europe (1977; 1979). The recommendation in the report on a working group on the place of health education in health administration (WHO Regional Office for Europe, 1977,) considers 'both long-term and short-term planned evaluation as a component of all health education programmes at all levels' as a professional responsibility for health education activity.

The conclusions and recommendations of the WHO working group on principles and methods of health education (WHO Regional Office for Europe, 1979, 11) requires, besides other things, that 'health education should be founded on a scientific basis, its methods should be scientifically tested and evaluated'.

The above illustrates the internationally recognised needs for more controlled studies about the effectiveness and efficiency of media in health education, and highlights the need for effective evaluation studies designed to measure health and education programmes aimed at tackling drug use.

Some studies report more favourable results than the above, however, as a result of methodological flaws, interpretation of these data is difficult. For example, Freidman (1973) examined the effects of a drug education programme which ran over a fourteen week period. Significant attitude changes were reported among the experimental group when compared with a group who were not exposed to the programme. However, the direction of attitude change was not reported and thus, the results cannot be taken as an indication of the effectiveness of the programme.

Similarily, O'Rourke and Barr (1974) reported a significant difference in attitudes between students who had received a drug education course over a six month period and a control group. However, as no measure of attitudes taken before the programme, one must be willing to assume that there were no pre-treatment differences between the two groups before accepting these results. Since the two groups were from different high schools, this assumption is difficult to accept.

It is problems of the type mentioned above that make the task of measuring the effectiveness of drug education programmes designed to influence drug related attitudes and behaviours difficult.

More alarming than methodological flaws and lack of empirical data, perhaps, is the finding that some

studies have reported negative findings with respect to the effectiveness of drug education programmes. For example, Mason (1973) investigated attitude change among students who had been exposed to an education programme which presented 'hard facts'. This investigator found that students were more knowledgeable with respect to drugs after exposure to the programme however, their attitudes became more favourable regarding legalization of marijuana and they were more in favour of reducing legal penalties for drug use. In addition, these students indicated that they were more likely to use drugs to deal with psychological discomfort and indicated an increase in curiosity about the effects of drugs.

Findings such as the above suggest that some drug education programmes may, in fact, increase curiosity in certain vulnerable individuals, and thus exacerbate the drugs problem rather than reduce it.

The above studies are only a few examples of the many studies carried out in attempts to change attitudes and behaviours regarding drug use by means of disseminating factual knowledge about drugs. Many other studies have been carried out (e.g. Weir, 1968; Rosenblitt and Nagey, 1973; Stenmark, Kinder, and Milne 1977; Rivers Sarata, and Book 1974., etc.) which suffer from the same methodological and empirical flaws mentioned above. In general, the

findings from studies carried out in this field suggest that the assumption that increases in factual knowledge will lead to more negative attitudes towards drugs and subsequent decreases in drug use has not been confirmed (Kinder et. al., 1980).

The effectiveness of imparting knowledge regarding the adoption of healthy behaviours has been the concern of many researchers for several decades. The area which has attempted to examine the most effective technique for imparting health knowledge is the area of persuasive communication.

## 8.4. Strategies of Persuasive Communication

Basically there are two major strategies of persuasive communication. The first is Active Persuasion whereby the individual may gain information by observing objects, people, and events, in a given situation. The second is Persuasive Communication whereby the individual is provided with items of information by some outside source. Persuasive communication has always been viewed as the major strategy for influencing people to change their behaviour. Much of the information in persuasive messages comes to us via many routes and is designed to influence our beliefs, attitudes, intentions and behaviours (Fishbein and Ajzen, 1975).

Over the years investigators have examined the

relative effectiveness of various types of persuasive appeals. The question that has frequently been asked is whether such communications are effective in influencing people to change their beliefs, attitudes, intentions and/or behaviours. One area of research that has attempted to contribute to the effectiveness of persuasive communication is the area of fear arousing communications. The name reflects the emphasis of fear in the mediation of communication. The issue that has been frequently raised is whether or not it is more effective to arouse fear in the subject in order to get him/her to adopt a healthier way of life.

## 8.5. The Fear Drive Model Of Persuasive Communication

The model which has guided the bulk of studies in this area is the fear-drive model, (Hovland, Janis, and Kelley, 1953) and the non-monotonic models proposed by Janis and Feshback (1953) and McGuire, (1968). The fear drive model is a variant of the classic drive reduction model used in many animal studies. It assumes that the emotional response of fear functions as a drive which mediates belief change and behaviour change.

The basic assumption is that fear serves as a drive to motivate trial and error behaviour. A reduction in the strength of fear reinforces the learning of any new response that accompanies it.

When fear is aroused, the recipient will become highly motivated to try out various responses to alleviate the unpleasant state. If the communication contains a recommendation that the recipient should adopt to avoid the threat, and if mental rehearsal of the recommendation takes place, then a marked reduction of fear will follow. This reduction in fear reinforces the learning of any new response that accompanies it. If cognitive rehearsal of the recommendations fails to reduce the fear level, spontaneous responses will be tried out until one is hit upon that reduces the tension.

## 8.6. Criticism of the Fear Model

Sutton (1979) points out that there are a number of logical and theoretical problems with the formulation of the fear drive model. The first problem concerns the nature of the fear. The fear drive model was adapted from the drive reduction models employed by animal learning theorists such as Miller (1951). Implicit in the model is that the essence of fear is autonomic; skeletal activity comes to be associated, through the classical conditioning process, with formally neutral cues. Hovland et. al. (1953), however, seem to regard fear in cognitive terms i.e. anticipation of unpleasant consequences and later, Janis (e.g. 1967) develops these ideas in his

concept of reflective fear. According to this view, fear arousal would seem to involve belief formation in which the recipient forms a cognitive link between the object (my heroin taking) and the attribute (painful abscesses). Thus it appears that the fear drive model can be conceived as a cognitive response.

Secondly, it is unclear from the fear drive model whether the probability of repetition of a response is determined by the amount of fear reduction or the 'completedness' of the reduction. Consider, for example, a situation in which a recommendation of a given message completely reduced a 'moderate' level of fear but not a 'high' level of fear, the size of reduction being greater in the latter case. It is unclear from the model which condition would yield the higher probablity of acceptance.

Finally, if mental rehearsal of the recommendation is successful in reducing fear, it is unclear why a person's cognitive response should lead to a particular behaviour. Thinking about averting the threat, if it alleviates fear, should be sufficient.

Implicit in the fear drive-model is the notion that the relationship between fear and acceptance of the recommendations is non-monotonic. For example, if the perceived efficacy of the recommended action remains constant, an increase in fear will produce first an increase in probability of acceptance of the

recommendation. When the level of fear is such that rehearsal of the recommendation in the communication successfully reduces it there will follow a decrease in acceptance, i.e. when the level of fear is such that the recommendation fails to reduce it to zero. The optimal level of fear will be the maxium level that can be successfully reduced by thinking about the recommendation.

The non-monotonic relationship between fear and acceptance was elaborated in a family of curves model (Janis, 1967). The model assumes that increases in fear have multiple effects, some of which facilitate persuasion and others of which have an interfering effect. For example, an increase in fear may increase motivation to find a means of avoiding the danger (facilitation) and at the same time lead to a more critical evaluation of the recommended action (interference). It is assumed that facilitation increases more rapidly than interference as fear level increases from zero level, but that at some point interference starts to increase at a faster rate. The resultant relationship between fear and acceptance takes the form of an inverted U-shaped curve with the optimal point occurring at the level of fear at which the interfering effects start to increase at a faster rate than the facilitating effects. The optimal level of fear arousal will depend upon the value of any variable that affects the relative strength of

facilitating and interfering effects. One such variable would be the percieved efficacy of the recommended action. For each different level of efficacy there will be a corresponding inverted U-shaped curve representing the relationship between acceptance and fear-arousal.

In his review of the literature on fear-arousing communications Janis (1967) demonstrated that the previous inconsistent findings in fear appeal research can be reconciled by the curvilinear model. Unfortunately, as clearly demonstrated by Leventhal (1970) the model is so flexible that it can accommodate virtually any pattern of findings.

Another non-monotonic model was proposed by McGuire (1968). According to McGuire's model, the process of persuasion involves two basic steps. The first is the reception of the message (the degree to which it is attended to and understood), the second is yielding to the argument.

In its simplest form McGuire's model can be written symbolically as in Equation 1 below:-

Equation 1:

$$p(O)=p(R)p(Y)$$

where p(O) is the probability of opinion change; p(R) is the probability of effective reception; and p(Y) is the probability of yielding to what is received. McGuire suggests that the reception mediator can be

measured directly on the basis of the degree to which the message was received and the amount of opinion change produced. Consider for example, a message that was well received but produced little opinion change. According to McGuire's model, lack of persuasion must then have been due to a low degree of yielding.

The amount of fear aroused, like many other independent variables, is assumed to be related in a compensatory fashion to these two mediators of attitude change. In particular, consideration of the drive properties of fear leads to the expectation that it will be positively related to yielding. As a cue, on the other hand, fear evokes habitual responses which will tend to interfere with reception of the message; thus, fear is expected to be negatively related to reception. Given appropriate assumptions concerning different rates of change, the resultant relationship between fear and acceptance will be an inverted U-shaped curve as in the Janis model. If post-exposure anxiety level is assumed to be a simple additive function of the individual's chronic anxiety level and the anxiety aroused by the communication, then the model predicts an interaction between these two variables on acceptance. In particular, a given increase in message fear should increase acceptance among individuals of low chronic anxiety and reduce acceptance among individuals of high chronic anxiety. (Precisely the same predictions can be made from other

models).

McGuire's model is open to the same objections as Janis's model with regard to its ability to accommodate opposite findings ex post facto, and the requirement for elaborate factorial designs to test its predictions. There has been only one empirical test of McGuire's model as applied to fear arousing communication (Millman, 1968) and it yielded only partial support for the model.

## 8.7. Review of the Findings from the Research on Fear Arousing Communication

An erroneous consensus of opinions exists that fear, as a motivator of behaviour, is ineffective. A review of the literature suggests that the picture is somewhat more complicated. Table 18 below illustrates that studies conducted on fear-arousing communications cover a wide range of topics, subjects, and communication media.

**Table 18: Topics Used in Fear Appeal Research.**

Dental hygiene
Smoking
Tetanus
Safe driving
Fallout shelters
Population growth
Mental health
Cancer
Safety belts
Roundworms
Grades
Tuberculosis

Syphilis
Viewing the sun
Army life
Donating blood
Heart disease
Mumps
Obesity
Energy consumption
Venereal disease.

From a close examination of the studies conducted on fear appeals it is clear that, in some instances, high threat is superior to low threat. These findings suggest that a blanket dismissal of fear as a motivator of behaviour is unwarranted. The remainder of this chapter will attempt to draw together and summarize the findings from these studies and to assess their bearing on the validity of the fear drive model.

The aim of fear appeal communicaton is to (a) associate an undesirable practice with negative circumstances or (b) to associate an undesirable practice with avoidance of negative consequences. The assumption being that the higher the level of fear the greater the effectiveness of the persuasive communication, i.e. the more you scare a person the more persuaded they will be.

The first basic question to be answered from the fear drive model is whether it is the case that an increase in fear is associated with an increase in acceptance of the appeal. To determine whether there is such an association Sutton (1982) re-examined the

findings from fear appeal studies carried out over the last three decades. His re-examination of these studies was restricted to published studies that (a) attempted to manipulate fear by presenting communications with different fear-provoking potential: (b) included a check on the effect of the manipulation (i.e. a post-exposure measure of fear): and (c) included a measure of acceptance that had a clear behavioural referent. Sutton's rationale for this strict selection criterion can be found in the work of Fishbein and Ajzen (e.g. Ajzen and Fishbein, 1975) which shows the importance of distinguishing between different kinds of 'attitude' when the object is to predict and explain behaviour.

Overall, 35 studies were re-examined by Sutton. To determine whether there was an association between fear and acceptance Sutton utilized the statistical procedure of meta-analysis i.e. summarizing the findings of a large and diverse range of topics by means of an overall analysis. The data from each study were re-analysed in the form of a single-degree-of-freedom comparisons between highest experimental fear group and lowest experimental fear group and/or highest experimental fear group and one or more control groups. These comparisons were computed for fear-arousal and for one or more measuress of acceptance.

Generally, the findings suggest that increases in fear are associated with increases in acceptance. This finding is less clear for behaviour than intention. However, Sutton points out that the intention measures in these studies are relatively homogeneous compared with the behaviour measures.

Twenty of the thirty five studies re-analysed by Sutton included three of more levels of fear condition and therefore enabled an assessment of the inverted-U hypothesis. It was found that significant increases in fear were very rarely accompanied by an inverted-U pattern in the response pattern yielding little support for the curvilinear hypothesis.

Overall, the review of the findings on fear-arousing communications yielded little support for the fear drive model. The main positive result to emerge was that increases in fear are associated with increases in intentional, and to a lesser extent, behavioural, measures of acceptance.

## 8.8. Variables Which Affect the Persuasiveness of a Threat

In addition to the manipulation of fear level, many studies have attempted to determine the variables which affect the persuasiveness of a threat (i.e. interact with the fear level). The factor that has received the most attention is the effectiveness

of recommendations which are given in the appeal for avoiding the undesirable consequences potrayed in the communication.

**Recommendations**

The nature of the recommendation has been the subject of several subsequent studies. Moltz and Thistlethwaite (1955) found that, although explicit assurance to the efficacy of the recommended procedure was effective in producing anxiety reduction, the anxiety reduction was not associated with greater reported conformity to the recommendation i.e. toothbrushing.

Rogers and Thistlethwaite (1970) found a significant interaction, fear x reassurance, on smokers' beliefs about lung cancer; with high fear low assurance group showing the least acceptance, a prediction supporting the fear drive model. A similar interaction was not found, however, for intentions. A main effect of reassurance was found for intentions for smokers, with higher reassurance producing stronger intentions.

Rogers and Deckner (1975) (smokers only sample), did not find any effect of reassurance on beliefs, but found a significant effect on reported cigarette consumption; the highly reassured group was smoking

less at one week and one month after exposure than the low reassured group.

Rogers and Mewborn (1976) found a main effect for efficacy for smoking, safe driving, and venereal disease. There was also a significant interaction between fear and efficacy for the venereal disease study. However, their findings were not consistent with the fear drive model which would predict that least acceptance would occur in the high fear low efficacy condition. They also found a significant interaction between efficacy and probability of threat on intention among smokers to stop smoking with the least acceptance occurring in the low-efficacy-high probability condition. This suggests that resistances are aroused when individuals expect a severe threat that they feel they are unable to avoid. (See Rogers and Mewborn, 1976, p60).

In the remaining four studies it was possible to examine the effect of reassurance on fear. Dabbs and Leventhal (1966) found that manipulations of the effectiveness of the recommendation to have a tetanus injection (i.e. perfect versus imperfect protection) did not have any significant effect either on fear, intention to take an injection, or on injection taking behaviour. Griffith and Rogers (1976) successfully manipulated the efficacy of safe driving procedures in avoiding accidents but found no significant effect on intentions to drive safely or

number of errors made on a driving simulation task. Mewborn and Rogers (1979) found that reassurance significantly reduced self reports of fear but did not affect physiological indices. Higher reassurances significantly strengthened intentions to use 'wonder' drugs for venereal disease but there was no interaction with fear. Finally, although Chu (1966) did find a slight tendency for subjects to minimize the threat when the recommended solutions were not seen as efficacious, there was a marginally significant interacton between efficacy and fear but this was not consistent with the fear drive model.

From the results presented above, (excluding the Mewborn and Roger's (1979) study) it appears that greater efficacy produces stronger intentions to adopt the recommended response. Leventhal, Singer, and Jones (1965), after his review of some relevant findings, concluded that when the actions recommended are clearly effective, attitudes and behaviour changes are more likely to take place than if doubts exist about response effectiveness. However, this conclusion describes efficacy as a main effect: i.e. regardless of the level of fear, persuasion is more likely to be successful if the recommendations are perceived as efficacious. Therefore, the efficacy variable will not aid in reconciling inconsistencies in past studies. The research does not sufficiently indicate that perceived efficacy of the

recommendations offered in a threat appeal interacts with fear level in affecting persuasion.

## Specificity of Recommendations

Another variable which appears to be important in contributing to the effectiveness of a fear appeal is the specificity of the recommedations. According to the fear drive model, specific instructions should have a similar effect to reassurance about the effectiveness of the communication, i.e. there should be an interaction with acceptance.

In communication on tetanus, Leventhal, Jones, and Trembly (1966) and Leventhal, Singer, and Jones (1965) varied the fear levels and the specificity of instructions for obtaining injections. More of the subjects who received specific instructions actually took injections than those who did not receive specific instructions. However, the fact that none of the subjects in the recommendations-only control group obtained an innoculation suggests that specific information alone is not sufficient to influence behaviour.

The lack of an interaction between fear level and specificity of recommendation is inconsistent with the fear drive model. If fear becomes increasingly motivating as feal level increases, then specificity should have more effect for a high fear message than a

low fear message, since the recipient should be more motivated to take action to reduce the fear and avoid the threat.

There is some suggestion that, although specificity may not interact with fear, the mere presentation of recommendation (as compared with no recommendation on how to avoid the threat) may interact with the fear level. In a smoking study, Leventhal, Watts, and Pagano (1967) found an interaction between fear and instruction on how to stop smoking. Instructions helped smokers to maintain their reduced consumption in the high fear condition more than the low fear condition.

## The Positioning of Recommendations

The positioning of the recommendations relative to the threat in a communication was suggested by Cohen (1957) as an important variable. From the standpoint of the fear-drive model, the position of recommendation should be crucial in influencing the effectiveness of a communication. Given that the recommendation is perceived to be effective, the optimum position should be immediately after the fear arousing part of the message when the level of aroused fear is presumably at its peak and hence the amount of potential fear reduction is greatest.

Cohen (1957) found that a fear arousing communication in which information assumed to satisfy the aroused needs is placed after need arousal brought more acceptance of that information than a situation in which the information was placed before the need arousal. In Cohen's study, however, fear level was not experimentally manipulated.

Later studies do not indicate that positioning of the recommendations affects persuasion. Leventhal and Singer (1966) compared the effect of placing the recommendations before, intermixed with, or after the fear arousing material. They found that although fear reactions were reduced by moving the recommendations on dental hygiene from before, to intermixed with, to after the fear stimuli, this positioning had no significant effect on intentions to follow the recommended dental hygiene practices. The finding of no interaction between positioning and fear does not support the fear drive model which would suggest that the positioning of recommendations after the threat should be more effective than before the threat.

Skilbeck, Tulips, and Ley (1977) compared the following three conditions: fear material immediately followed by recommendations; fear followed by recommendations but with other neutral material in between; and recommendations preceding fear material. They found as predicted that the fear followed by recommendation condition was significantly superior to

the other two conditions which were mutually similar in their effect on weight change. It was the group which was exposed to the recommendations preceding fear material, however, that reported the most fear.

In interpreting the above findings, it should be noted that differences produced by varying the position of the recommendation may be due to cognitive structuring. For example, the superiority of the fear followed by recommendation condition in the Skilbeck et al. study might be due to the logical ordering of material which would enable the recipient to process the information relatively easily.

**Personality Factors**

Miller and Hewgill (1966) suggested that individuals differ in the kinds of statements they perceive as strong fear arousing appeals. A number of studies of fear-arousing communications have investigated the effects of personality factors, again with the expectation of interactions between the personality factors and fear level.

Janis and Feshback (1954) suggest that anxiety level may be an important variable for threat appeals. They found that subjects high in anxiety were less influenced by strong fear appeals that were subjects low in anxiety. This negative relationship between

chronic anxiety level and persuasiveness of increasing threat is an assumption underlying the defense-avoidance hypothesis of Janis and Feshback (1953). These researchers stated that high fear may be less effective than low fear because it arouses a high level of anxiety in subjects and causes them to reject the anxiety provoking message. Such an effect would presumably be greatest for subjects who are high in anxiety before the message is presented.

However, the effect of chronic anxiety level reported by Janis and Feshback (1954) has not been replicated in a number of studies which have examined anxiety (e.g. Niles, 1964; Singer, 1965). The Dabbs and Leventhal (1966) study (mentioned above) also measured chronic anxiety but found no significant effect on intentions to take a tetanus injection.

Goldstein (1959) investigated a person's characteristic way of coping with threat. According to Goldstein, one would predict an interaction between fear level and a person's 'coping style' similar to the one predicted by chronic anxiety. Goldstein compared 'copers' and 'avoiders'; categorized on an emotional version of the Sentence Completion Test and found that 'copers' receive strong appeals on dental hygiene better than 'avoiders', whereas among 'avoiders' the minimal-fear appeal receives greater acceptance. However, contrary to expectation, 'copers' did not respond particulary well to either

the high fear or the low fear messages.

Dziokonski and Weber (1977) in another study on dental hygiene, divided subjects into three groups according to their scores on a scale of repression-sensitization derived from the MMPI (Byrne, Barry, and Nelson, 1963). This was found to be related to three items measuring 'vulnerability' to gum disease, (repressors felt less vulnerable) but not to attitudes, intentions or learning; there were no interactions.

Self esteem of the recipient has been investigated by a number of fear appeal studies. Leventhal and Trembly (1968) found that self esteem was significantly related to several mood measures (activation, concentration and impotence) but not to a desire to take protective actions (e.g.safe driving practices). They reported an interesting interaction between intensity of the communication (e.g. loudness of the communication and size of pictures) and self esteem on protective intentions. Increasing the intensity of the threat strengthened the coping efforts of middle and high esteem subjects but decreased the efforts of low self esteem subjects. There was no evidence for emotional mediation. Leventhal and Trembly suggest a cognitive interpretation of their findings; they suggest that among the low self esteem subjects large pictures and

loud sounds created feelings of helplessness which lead to a breakdown of the coping mechanism.

Going from mild to high threat messages, Dabbs and Leventhal (1966) also found an interaction between self esteem and fear level on intentions to take a tetanus injection. From control to low fear condition low self esteem subjects increased their intentions; but showed no further increase under high fear. High self esteem subjects showed increased intentions only from low fear to high fear conditions.

Ramiriz and Lasater (1977) found that high self esteem subjects were significantly less anxious about their dental health than low self esteem subjects. High self esteem subjects also expressed significantly stronger intentions to perform the recommended dental hygiene practices when questioned one week later. Also, they cleaned their teeth significantly more recently than low self esteem subjects. There was no main effect on PHP score, but there was a significant interaction, with high fear and low fear equally effective in the case of high self esteem subjects but low fear less effective than high fear in the case of low self esteem subjects: a different pattern reported from that of Dabbs and Levanthal. A similar interaction was obtained on self reports of toothbrushing frequency.

In addition to self esteem and coping style,

subjects' perceived vulnerability to danger has been investigated by several studies. Niles (1964) in a study of smoking and lung cancer, divided subjects on the basis of their initial feeling of vulnerability to lung cancer. Only those people expressing low susceptibility were increasingly persuaded to stop smoking and take x-rays as threat increased; more vulnerable people showed no difference in their expressed desire to stop smoking or to take x-rays as messages became more frightening. This indicates that high threat is more effecitve than low threat for people who do not feel especially vulnerable.

Levanthal and Watts (1966) examined the effect of perceived susceptibility (to illness, lung cancer and car accidents) and found that subjects high in susceptibility, despite being significantly more frightened by the communication, did not differ from subjects low in susceptibility on intentions to take x-ray or decrease smoking or in actual behaviour.

Kirscht, Becker, Haefner, and Maiman (1978) found significant positive correlations between illness, threat and several other health beliefs measured before exposure on the one hand, and their outcome measures on the other hand. There were apparently no significant interactions.

Ley, Bradshaw, Kinley, Couper-Smartt, and Wilson

(1974) measured Extraversion, Neurotism and Internal External control. Of these only the last correlated significantly with the behaviour measure (weight loss): high scorers actually lost weight significantly faster.

Of the personality characteristics which have been suggested as interacting with fear level, the findings are complex and inconsistent. It seems that it is impossible to draw any firm conclusions regarding this variable on interacting with fear.

**Communicator Variables**

Source credibilityy has been another variable postulated to an important factor in threat appeals. The race of the communicator was varied in three studies of dental hygiene using schoolchildren as subjects. In the first of these studies, Ramirez and Lasater (1977) found that an Anglo-American communicator aroused significantly more fear than a Chicano-American communicator, though this depended on the self esteem of the subjects, who were predominately Anglo-American. On the index of tooth cleanliness, the group who had heard the Anglo-American communicator had significantly cleaner teeth one day and six days after exposure, though there were no significant differences in reported frequencies and recency of toothbrushing or intentions to brush one's teeth more frequently. The two other studies,

Dembroski, Lasater, and Ramirez (1978) used black or white communicators in all black schools and found that the black communicator did not arouse significantly more fear but did generate significantly more immediate behaviour change in terms of PHP scores. In both cases however, the pre-test scores of the experimental groups were not equivalent. The results of these three studies suggest that greater communicator-recipient similarity (in terms of race) produces more immediate behaviour change without necessarily affecting fear level.

This review has been concerned with variables which may influence the effectiveness of threat in persuasion. The main area in which conflict occurs among the findings has been the fact that some studies indicate that high fear is more persuasive and others indicate that low fear is more persuasive. The suggestion of Janis (1967, 1968a, 1968b), McGuire (1963, 1966, 1968) that attitude change, or behaviour change, increases with increases in fear level up to a certain point and then decreases with further increases in fear level has not been confirmed.

Unfortunately, there is no accurate way of determining the comparability of fear levels from one study to another. Fear levels used in various studies have been described in such terms as 'low', 'weak', 'mild', 'medium', 'moderate', 'high' and 'strong'.

What may have been labelled 'high fear' in one study may have been equivalent to 'medium fear' in another study - if the two kinds of fear were equivalent (Fishbein and Ajzen, 1975).

The studies reviewed above have been concerned with the nature of the recommendations, personalilty characteristics of the recipients and communicator factors. The main findings can be summarized as follows:-

1. There is no evidence that fear and acceptance are related in a non-monotonic fashion.

2. The nature of recommendations has been subject to a considerable number of studies. The specificity of the recommendations lead to a higher rate of acting. Efficacy may also be important as a main effect but has received only weak support as interacting with fear level. Positioning of the recommendations relative to the threat within the communication does not appear to be important.

3. Providing specific instructions about how to perform the recommended action leads to a higher rate of activity.

4. Greater similarity between communicator and recipient in terms of race produces more immediate behaviour change without necessarily affecting fear.

5. There is meagre support of the interactions predicted by the fear drive model.

6. Finally, the widely cited conclusion that high fear arousal creates a defensive-avoidance reaction

which causes high threat to be less persuasive than low threat is not true in most situations. Most relevant research has indicated that high threat is more effective than low threat in persuasion. Thus, the standard doctrine that fear is ineffective in all situations is untrue. Many studies have indicated that high fear is consistently associated with increases in intentional and behavioural measures of acceptance.

# CHAPTER NINE

# 9. THE FISHBEIN-AJZEN THEORY OF REASONED ACTION

## 9.1. Introduction

The previous chapter demonstrated that the findings from fear-appeal research are conflicting and inconsistent. At the present time it appears that there is relatively little known about the basis for (or the determinants of) a given decision. For example, in the area of addiction, despite the enormous amount of research on smoking that has been conducted, all we have learned to date is that many factors have been found to be related to various smoking behaviours at one time or another. Unfortunately, theorists in the smoking area have been unable to develop an empirically supported, systematic theory of smoking that can account for a person's decision to start, continue, or to stop smoking. There is, however, a general consensus that: (a) different factors underlie smoking decisions, i.e. the factors underlying the initiation of smoking are different from those underlying the maintenance or continuance of smoking, which, in turn, are different from those underlying the cessation of smoking; (b) there are a large number of factors underlying any given smoking decision; (c) with respect to any given behaviour (e.g. continuing to smoke), the factors influencing one person's decision to continue may be

very different from the factors that influence this same decision in another person. As the American Advisory Committee to the Surgeon put it:

> "there is no single cause or explanation of smoking.....smokers may start, continue, and discontinue in response to different inner needs and external influences, social and other."

(U.S., Department of Health, 1964, pp376).

Perhaps as a result of this conclusion, it has often been argued that because of 'the diversity of needs which impel different persons to smoke....no general rule concerning efforts to persuade people not to smoke, or to give up smoking, will be valid or effective....., no single approach will be satisfactory for more than a minority of individuals.....', (Larson and Silvette, 1968, p304).

Despite this pessimistic outlook, Fishbein and Ajzen (1975) have forwarded a social-psychological theory of behaviour which provides a framework for analysing the factors underlying the performance (or non performance) of any given behaviour. The theory also provides a model of persuasive communication which can be used to develop intervention programmes aimed at changing behaviour.

As an explanation for the inconsistent and inconclusive findings of fear appeal research,

Fishbein and Ajzen (1975) argue that the usual assumption that high fear will facilitate acceptance of a message is erroneous. They argue that differences found in differential persuasion may be attributed to differences in information provided by the message rather than to levels of fear. Message content is thus confounded with levels of fear and, even if an increase in fear is obtained, it cannot be unambigiously attributed to a higher level of fear. As so little attention has been paid to differences in information provided, inconsistent findings are to be expected.

More importantly, Fishbein and Ajzen (1975) argue the dependent variables in fear appeal studies have varied considerably and manipulations of fear level have frequently been found to have different effects on beliefs, attitudes, intentions, and behaviours. Of equal importance, they argue, is the fact that so little attention has been paid to the relation between the belief statements constituting a message and a given dependent variable.

Perhaps the most fundamental principle underlying Fishbein and Ajzen's approach to persuasion is their assumption that man is 'basically a rational information processor, whose beliefs, attitudes, intentions, and behaviours are influenced by the information available to him' (Fishbein, 1980).

'(This) information is used in a reasonable way to arrive at a behavioural decision', (Ajzen and Fishbein, 1980). Based on this assumption, the theory is known as A Theory of Reasoned Action. According to the theory, behaviour is ultimately determined by a person's underlying beliefs. Thus, changing a person's behaviour is primarily a matter of changing the person's underlying cognitive structure. For Fishbein and Ajzen, an analysis of a persuasive attempt must begin with the items of information made available to the person in the persuasive attempt. In order to explain Fishbein and Ajzen's postulated model of persuasive communication it is necessary to give an overview of their theory of reasoned action as it is presently formulated.

## The Theory of Reasoned Action

The theory of reasoned action specifies in a mathematical way the relationship between beliefs, attitudes, intentions and behaviours. In some respects the theory can best be looked at as a series of hypotheses linking (1) behaviour to intention; (2) intention to a weighted combination of attitude and subjective norm; (3) attitude and subjective norm to behaviour and normative beliefs.

The ultimate goal of the theory is to predict and understand an individual's behaviour. The theory makes the assumption that most behaviours of social

relevance are under volitional control and, consistent with this assumption, the theory views a person's intention to perform (or not to perform) a particular behaviour as the immediate determinant of that action. Accordingly, barring unforseen events, a person's intention should permit a highly accurate prediction of his/her behaviours. Fishbein and Ajzen (1975) point out that, obviously intentions can change over time; the longer the time-interval, the greater the likelihood that events will occur which will produce changes in intentions. It follows that accuracy of prediction will usually increase as the time interval between measurement of intention and behavioural observations decreases.

The theory is a modified version of Dulany's (1968) theory of propositional control. Like the original theory, Fishbein and Ajzen's theory deals with the prediction of specific behavioural intentions in a well defined situation. As this thesis is concerned with illicit drug use, the theory will be discussed in relation to this topic.

## 9.2. Identification of the Behaviour of Interest

The first step in applying the theory of reasoned action to the area of substance abuse is the identification of the behaviour(s) of interest. According to Fishbein and Ajzen (1975), a full

identification of any behaviour requires consideration of the four elements of action, target, context and time. That is, according to the theory, every action occurs with respect to some target in a given context and at a given point in time. For example:

Element 1, <u>action</u>: is the behaviour one of taking a hit or a snort?

Element 2, <u>target</u> at which the action is directed : is the action directed at heroin, cocaine?

Element 3, the <u>context</u> where the action occurs: is the action performed in the kitchen, a pub?

Finally, every behaviour has a <u>time</u> component: is the action performed at noon, in the evening?

Although one may arrive at more general behavioural criteria by generalizing across one or more of these elements, a change in any of the four elements changes the behaviour of interest. As the behaviour changes, so too do its determinants. And as the determinants change, so too may the most effective interventions.

In the domain of substance abuse, there are a number of different actions of interest. One action of interest may be prevention. Other actions might be decreasing usage or stopping usage altogether. According to the theory, the cognitive structure underlying each of these actions could be very different.

In a similar way, changing the target of the action also changes the behaviour determinants. For

example, trying heroin, according to the theory, may be very different from trying alcohol and one's beliefs about trying heroin may be very different from one's beliefs about trying alcohol. Moreover, one's beliefs about trying drugs (in general) may be very different from one's beliefs about trying a particular drug.

The context of behaviour is another factor to be considered in identifying the behaviour of interest. Drugs can be used in many different contexts: alone, at home, in a pub, with friends, at a party, and so forth. For many change programmes the context is best left general or unspecified. However, since the consequences of using a given drug in these different contexts could be quite different, there might be a situation in which it is useful to differentiate contexts in developing educational programmes.

Finally, in conducting research to understand and change behaviour, it is important to determine the appropriate time frame. Again, on the basis of the theory, one would expect the beliefs about the consequences of using a particular drug 'occasionally' to differ from those using the same drug 'regularly'. Similarily, the consequences of 'not using heroin tomorrow' are likey to be very different from the consequences of 'not using heroin during the next two weeks'.

## 9.3. Behavioural Intentions

Once a behaviour has been identified, the theory assumes that the behaviour can be predicted from the intention to perform that behaviour (i.e. the correspondent behavioural intention) providing that the behaviour is largely under volitional control. Thus, by influencing the appropriate intentions one should be able to prevent or reduce the degree or type of drug use.

Fishbein (1980) noted that, although a person's intention to perform a given behaviour is the best single predictor of whether or not the person will perform that behaviour, predictions may be improved by measuring intention with respect to all of the person's alternative courses of action.

When a person is confronted with two mutually exclusive and exhaustive alternatives, (e.g. to try or not to try a particular behaviour) knowledge of one of the two intentions will usually be sufficient for predicting the person's choice. This is not the case however, when more than two alternatives are available or when the individual does not view the presented alternatives as being mutually exclusive and

exhaustive. For example, even although a current heroin user may have a relatively weak intention to increase the amount of heroin he/she uses, he/she may in fact increase his/her intake if his/her intentions with respect to other alternatives (e.g. decreasing amount of heroin, stopping, and maintaining his/her current level of heroin use) are even weaker.

Thus, for maxium prediction, it is important to properly identify the alternatives that the actor perceives as being available and to assess the intention which corresponds to each of these alternatives. It follows from this that one can influence an individuals choice by increasing intentions with respect to one alternative or by reducing intentions with respect to other alternatives.

In sum, according to the theory of reasoned action, the immediate determinant of a person's overt behaviour is the person's intention to perform that behaviour. Thus, if a person's intention regarding some object (e.g. intention to buy brand x or brand y) or person (e.g. intention to vote for Candidate A or Candidate B) is known, this would be the single most important piece of information to have in attempting to predict the person's eventual behaviour. Often, however, we are not privy to a person's intentions. To find out what a person's intentions are about

performing a particular behaviour requires an identification of the determinants of intention.

## 9.4. Identification of the Determinants of Behavioural Intentions.

According to the theory of reasoned action, two major factors determine a person's behavioural intention to perform a given behaviour. One is personal in nature and the other reflects social influences. The personal factor is the individual's positive or negative evaluation of performing the behaviour; this factor is termed the attitude towards the behaviour. It is important to note that attitude as specified by the theory is the individual's attitude towards his or her own performance of the behaviour in question. Thus, if one wishes to increase a person's intention to stop using heroin, one would have to change the person's attitude towards 'my stopping using heroin'.

Fishbein and Ajzen (1975) state that it is possible to assess a person's attitude towards performing some behaviour on a series of evaluative semantic differential scales (Osgood, Suci, and Tannenbaum, 1957). These measures of attitude, like all standard attitude scaling procedures, result in a single score which represent a given person's general evaluation or overall favourableness or unfavourableness towards the behaviour in question.

Other things being equal, the more favourable a person's attitude is towards a behaviour, the more he/she should intend to perform that behaviour; the more unfavourable his attitude is, the more he/she should intend not to perform the behaviour. Fishbein and Ajzen do not deny the importance of factors like perceptions, motivation, etc. They see no useful purpose served by treating them as part of attitude. Instead, they prefer to treat them as separate concepts that can be related to attitudes. Thus, the first step in predicting and understanding behavioural intentions is to obtain a measure of the person's attitude towards his/her own performance of the behaviour in question.

The second determinant of intention, the subjective norm component, deals with the influence of the social environment on intentions and behaviour. This component refers to the person's perception of the social pressures put on him/her to perform or not to peform the behaviour in question. This perception may not reflect what important others actually think that the actor should or should not do. The more that a person perceives that others who are important to him/her think that he/she should perform a particular behaviour, the more he/she will intend to do so. That is, other things constant, people are viewed as intending to perform those behaviours they believe important others think they should perform.

Conversely, if they believe important others think they should not perform a behaviour, they will usually intend not to do so. The same considerations regarding the attitude component hold with respect to the subjective norm component. One should always attempt to change the subjective norm that corresponds directly with the behaviour of interest. If one wishes to increase an individual's intention to stop using heroin one would try to change the individual's subjective norm which responds to stopping heroin.

Subjective norms concerning a particular behaviour are a function of the person's normative beliefs about the prescriptions of various reference groups and individuals with respect to that behaviour and the person's motivation to comply with these referents.

Thus, it is necessary to measure the person's attitude toward the behaviour and to assess his/her subjective norm in order to predict and understand intention.

## 9.5. The Attitudinal or Normative Component

In most instances people hold favourable attitudes towards behaviours their 'important others' think they should perform and negative attitudes towards behaviours their 'important others' think they should not perform. In these instances, the two

components of intention are in agreement and prediction of intention is relatively straightforward.

Sometimes, however, the two components may not be in agreement. That is, a person may hold a favourable attitude towards performing a behaviour and believe that his/her important others think he/she should not perform it or vice versa. Fishbein and Ajzen (1975) argue that in such instances, the person's intentions will depend on the relative importance of the two components for that person. Each component is given a weight reflecting its importance as a determinant of the intention under consideration. A given component may have a very high weight or no weight at all. These relative weights may change from one person to another and from one behaviour to another. The weighted components are summed to predict intention. Frequently, however, both of these factors can be equally important.

For some behaviours, normative considerations (the perceived prescriptions of important others) are more important in determining behavioural intentions than the attitudinal considerations (the person's favourable or unfavourable evaluation of his performing the behaviour). For others, the reverse may be true.

The identification of the relative weights of the

two components is very important for the development of health education programmes. If a person's intention to perform some behaviour is under normative control little can be accomplished by changing the person's attitude towards performing the behaviour. Similarily, if the behaviour is under attitudinal control, the use of social pressures is unlikely to lead to behaviour change.

Thus, in the development of a behaviour change programme, it is essential that one identifies the relative importance of attitude and normative considerations for the intention and population of interest.

In the area of cigarette smoking, Chung and Fishbein (1979) asked sixty three college women to indicate their intentions to smoke , their attitudes towards 'my smoking', their subjective norms concerning smoking cigarettes. Consistent with their expectations, the young women's intentions were predicted with considerable accuracy from a knowledge of their attitudes and subjective norms, (R 0.83).

Fishbein (1980), Roberts (1979), (cited in Fishbein, 1982), and Chung (1980), examined non-smokers' intentions to start, and try a cigarette as well as smokers' intentions to stop, to decrease their smoking, and to change brands. They obtained highly significant multiple correlations (R ranging form 0.40

to 0.73) between the respondents' intentions to perform the behaviour in question and their attitude and subjective norm concerning the behaviour.

As was discussed above, the relative importance of attitude and subjective norms are expected to vary across behaviours and individuals. One of the most important implications of this is that very different intervention strategies may be required to change different intentions effectively in the same population; or change the same intention in different populations. Chung and Fishbein (1979) demonstrated that grade school children's intentions to try a cigarette and to start smoking are influenced as much by normative as by attitudinal considerations, while these two intentions are almost entirely under attitudinal control for young college women. In marked contrast, the grade school subjects' intentions to stop are almost entirely under normative control. The strategic implications of these findings cannot be underestimated. These results suggest that an anti-smoking campaign based on normative pressure may be an effective way to prevent the initiation of smoking in grade school students, but quite ineffective in reducing young women's intentions to try a cigarette or to start smoking. At the same time, however, the use of normative pressure should be quite effective in increasing young women's intentions to stop smoking, but it will be effective if one is trying to

convince grade school students to stop.

Based on these findings, it may be suggested that, in the area of heroin use, the relative importance of attitudes and subjective norms will change dramatically depending both on the behaviour in question and the population under consideration. Consequently, very different education programmes may be necessary to successfully change the same intention in different populations or to change different intentions in the same population.

The discussion of the theory up to this point can be summarized by Equation 2 below:

Equation 2:

$$B \sim BI = W_1 A + W_2 \mathcal{E}(NB)(MC)$$

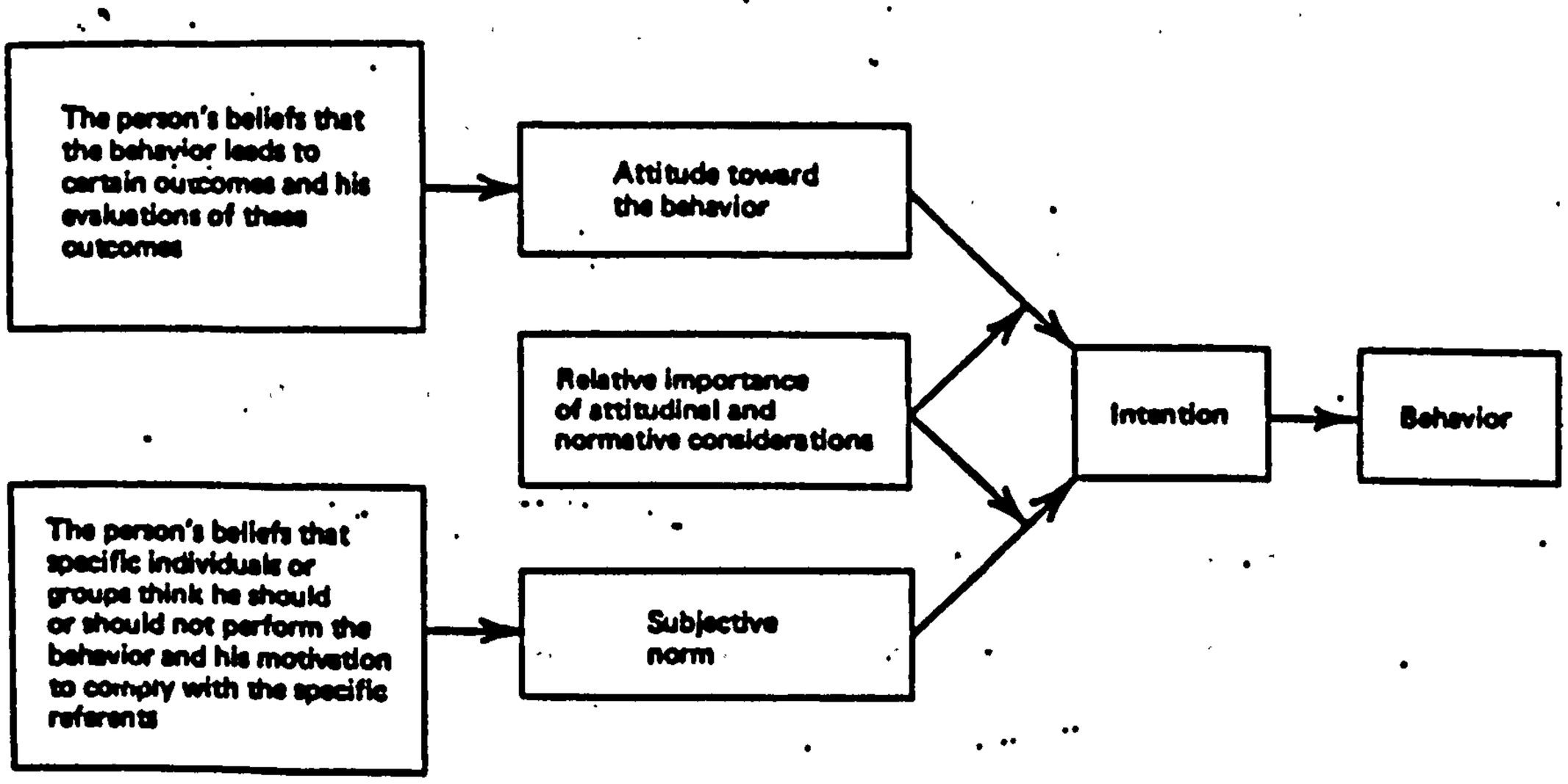
Where B represents overt behaviour; BI refers to the behavioural intention; A represents the person's attitude towards the behaviour; NB refers to one's normative belief that a certain referent expects one to perform the behaviour; MC is one's motivation to comply with this expectancy; and W and W are the relative weights attributed to the attitudinal component and the normative belief component respectively. The weights are determined by multiple regression procedures.

## 9.6. Determinants of Attitudes and Subjective Norms

The above discussion provided an initial insight into Fishbein and Ajzen's (1975) explanation of why people behave the way they do. The utility of the theory does not stop there. A more complete understanding of intentions requires an explanation of why people hold a specific attitude or subjective norm. The model proposed by Fishbein and Ajzen to explain this is an expectancy-value model which deals with the relation between beliefs about an object (object is used in the generic sense) and an attitude towards that object.

Beliefs are viewed by Fishbein and Ajzen as underlying a person's attitude and subjective norms, and they ultimately determine intentions and behaviours. Generally speaking, we form beliefs about an object by associating characteristics, qualities and attributes. We learn to like (or have favourable attitudes towards) objects we believe have positive characteristics, and we acquire unfavourable attitudes towards objects we associate with negative characteristics. Below is a summary flow chart of Fishbein and Ajzen's (1975) postulated relationship between beliefs, attitudes, intentions and behaviours.

Summary Flow Chart of Fishbein's and Ajzen's Postulated Relationship Between Beliefs, Attitudes, Intentions, and Behaviour




Note: Arrows indicate the direction of influence.

In the course of a person's life his/her experiences lead to the formation of many different beliefs about various actions and events. These beliefs may be acquired in a number of ways, e.g. direct observation, indirectly, self-generated etc. Some beliefs may persist over time, some may be forgotten and new beliefs formed. However, although a

person may hold a large number of beliefs about any object, Ajzen and Fishbein (1980) argue that a person can only attend to a relatively small number at a time. These beliefs, called salient beliefs, are the immediate determinants of a person's attitude. Thus, Fishbein and Ajzen's attitude model states that an individual's attitude toward any object (where an object can be any discriminable aspect of the individual's world), is a function of the salient beliefs that he/she holds about the object and the evaluations associated with those beliefs.

The theory of reasoned action specifies how different salient beliefs are combined to arrive at an overall evaluation of the behaviour under consideration, The integration process is described in Equation 3 below:

Equation 3:

$$A_B = \sum^{N} b_1 e_1$$

$A_B$ refers to the person's attitude towards the behaviour; B refers to the beliefs that a person has about the acts consequences in terms of the subjective probability that the act truly leads to each consequence; and e refers to the evaluation of the consequences.

Thus, according to the model, a person's attitude towards a behaviour can be predicted by multiplying

the evaluation of each consequence associated with an act by the subjective probability that the act really leads to that consequence and by summing the products.

Although in the theory of reasoned action, the above equation is used to predict attitudes towards behaviours, the formula may also be used to assess attitudes towards people, objects, and issues. For example, if A in the equation referred to a person's attitude about some object, then b would refer to the beliefs that the person has about the object's attributes, and e would refer to the evaluations of the attributes.

In the initial test of the above equation Fishbein (1963) had a preliminary group of subjects test all of the attributes they they believed characterized Negroes. Some of the attributes listed were: dark skin, athletic, friendly. A list of the ten most frequently mentioned attributes were then presented to a second group of subjects who rated each attribute on the liklihood that these attributes characterised Negroes (the belief dimension) and on their evaluation of these attributes (the evaluation dimensions). The estimate of the subjects' attitudes, obtained by summing the product of b and e for each attribute, correlated 0.80 with a more direct semantic differential measure of their attitudes towards Negroes. Furthermore, each component employed

alone did not correlate as well with the attitude measure (r=0.47 for e; r=0.65 for b) indicating that both components are important.

Similar high correlations between a direct measure of attitude and predictions from the additive belief model have been obtained across a wide variety of people, issues, and behaviours including such attitude objects as: presidential candidates (Fishbein and Coombs, 1974; Fishbein and Feldman, 1963); using birth control pills (Jaccard and Davidson, 1972): changing contraceptive usage intentions (McCarty, 1981); industrial psychology (Mitchell, 1974); college enrollment (Pomazal, 1980); drug consumption (Pomazal and Brown, 1977).

A person's subjective norm, like the attitude component, is also a function of beliefs but in this case, they are not behavioural beliefs but normative beliefs. The theory implies that, in forming a subjective norm, an individual takes into account the normative expectations of various others in his environment. That is, the person considers whether specific individuals and groups think he/she should or should not engage in the behaviour and he/she uses this information to arrive at his subjective norm. Clearly not every referent will be relevant or important to a person; only the salient referents will influence the person's subjective norm. Knowing a person's belief about the relevant referents is

insufficient to predict his/her subjective norm. It is also necessary to assess the person's motivaton to comply with each of his/her referents. This information is integrated into a general subjective norm as specified in Equation 4 below:

Equation 4:

$$SN = \sum^{N} (NB)\,(MC)$$

Thus, a person's general subjective norm can be predicted by multiplying one's assessment of another's endorsement of performing the behaviour (NB) by one's motivation to comply (MC) and summing the product obtained for each referent.

Just as attitudes correlate highly with a combination of b and e as specified by the model, the general subjective norm has been predicted very well by NB and MC. For example, Bowman and Fishbein (1978) in an attempt to predict how people would vote on an election initiative concerning nuclear power plant construction, showed that a direct assesesment of the subjective norm correlated 0.79 with $\sum^{N} NB\ MC$

Equation 5 below presents the full model for relating behavioural intentions to attitudes and subjective norms:

Equation 5: $$I \approx (W_1)\,(A_B) + (W_2)\,(SN)$$

(shortened version)

These weights represent the fact that attitudes and norms will not always be weighted equally in forming intentions. As was stated above, the relative importance of the two components in determining intentions may vary from one behaviour to another and from one individual to another.

Fishbein and Ajzen emphasize the necessity of ensuring correspondence between the measures of the attitudinal and normative components. Given correspondence, a weighted sum of the two components should provide accurate prediction of the intention.

Attitudes are based on the total set of a person's salient beliefs. People usually believe that performing a given behaviour will lead to both positive and negative consequences. The attitude toward the behaviour corresponds to the favourability or unfavourability of the total set of consequences, each weighted by the strength of the person's belief that performing the behaviour will lead to each of the consequences.

## 9.7. Implications of the Expectancy Value Model for Understanding and Changing Behaviour

The expectancy-value model of attitude has a number of interesting implications for understanding and

changing behaviour. According to the theory, two people can believe that performing a behaviour will lead to the same set of consequences, yet they might hold different attitudes. This would happen if they evaluate the outcomes differently or if the strengths of their beliefs are different. Similarily, two people may have the same attitude toward their own performance of a given behaviour, but, the beliefs underlying these variables may be very different (i.e they associate different consequences with performing the behaviour). So long as the expected value of performing the act is the same for the two people, they will have equivalent attitudes. In addition, different salient beliefs underlie different behavioural decisions, and different beliefs may be salient in different populations or different segments of a population.

Within the area of alcohol use for example, it would be expected that the salient beliefs underlying the behaviour of starting to use alcohol would be very different from those determining other drink use behaviours such as stopping the use of drink. And one person's beliefs about starting to drink may be very different from those of another person. The study by Davies and Stacey (1972) may serve to highlight the importance of this point. This study investigated the beliefs of young adolescents about the characteristics, qualities, and attributes of teenage

drinkers. One important finding was that many teenagers associated drinking with 'toughness'. Fishbein and Ajzen (1977) argue that such beliefs could be material for drinking decisions. This would be the case if, for example, a belief such as 'drinkers are tougher than non-drinkers' lead to the formation of beliefs such as 'my drinking will make me appear more tough' and/or 'tough people think I should drink'. Similar processes could operate in the area of heroin use. For example, a belief such as 'heroin use will make me more dangerous or aggressive' may lead to the formation of beliefs such as 'my taking heroin will make me appear more dangerous and aggressive' and/or 'dangerous and aggressive people think I should take heroin'. Considerations such as the above make it clear that images or stereotypes of heroin users may play an important role in the initiation of taking heroin. This point highlights the importance of knowing the extent to which beliefs about heroin users and non-heroin users accurately reflect the actual characteristics, qualities, and attributes that heroin and non-heroin users possess. Clearly if the image of heroin users is false and negative (i.e., if people believe that heroin users possess negative characteristics which they do not, in fact possess) and/or if the image of the non-heroin user is false and positive, (i.e., if people believe that non-heroin users possess positive characteristics which they do not, in fact, possess) this would indicate that the lay public are misinformed in an

area that is potentially material to the heroin taking decision. While there appears to be no national data bearing on this topic, the results from Experiment 1, no photo condition, indicate that the lay public holds a somewhat misinformed image of heroin users. Thus, according to Fishbein and Ajzen (1975), any influence attempt designed to change a given behaviour must, firstly, identify the beliefs which are salient for the specific behaviour in question and in the population of interest.

The importance of the identification of the appropriate salient beliefs for a particular behaviour in the population of interest was highlighted by Pomazal and Brown (1977). These researchers asked a sample of college students to report the advantages of 'smoking marijuana'. Mentioned outcomes such as 'makes me feel relaxed' were reported. These and other salient outcomes were used to construct a questionnaire which was administered to a new sample of students. These students were asked to (1) rate the strength of their belief that their smoking marijuana would lead to each of the outcomes and (2) their evaluation of each outcome. Consistent with the expectancy-value model, each belief was multiplied by its evaluative aspect and the sum of these products accurately predicted the reported attitude towards 'smoking marijuana', ($r=.69$, $p<0.01$).

Pomazal and Brown (1977) went on to compare the beliefs and evaluations of those students who intended and those students who did not intend to smoke marijuana. They found that intenders and non-intenders differed very little in their evaluations of the salient outcomes. The two groups also held many beliefs in common. However, some beliefs did discriminate between the intenders and the non-intenders. Moreover, while non-intenders believed that smoking marijuana may be injurious to their health, intenders believed the opposite.

These findings emphasise the point made by Fishbein and Ajzen that appropriate beliefs must be identified before any change can occur. If information was provided that would increase the belief that smoking marijuana is harmful to health, this should lead to less favourable attitudes towards smoking marijuana.

## 9.8. Evidence for the Prediction of Intentions from Attitudes and Subjective Norms

Accumulated research has provided rather consistent support for the notion that behavioural intentions can be predicted from attitudes and subjective norms as specified by the theory of reasoned action.

A wealth of data supports Fishbein's general

speculation that family planning intentions are related to attitudes toward family planning behaviour and to the perceived expectation of important social referents. Jaccard and Davidson (1972) reported a strong correlation (R=.84) between the intention of college women to use birth control pills and the model's two components, attitude toward using birth control pills and beliefs about the birth control behaviour expected by important referents. Similar data were reported by Fishbein and Jaccard (1973) for a different sample of college women and other means of contraception, (IUD and diaphragm). In a larger study, Davidson and Jaccard (1975) used the full model in an attempt to determine whether having a baby could be predicted from attitude and subjective norm. In the initial phase of the study, they interviewed 270 married women from two religious groups, (Catholic and Protestant) and three socio-economic classes, (high, middle and low) and assessed their attitudes and subjective norms about having a baby within the next two years. The women rated various outcomes of having a baby in the next two years (e.g. making my marriage stronger, restricting my freedom, etc.) on both the likelihood and the evaluation dimensions. The women also rated the likelihood that important reference persons favoured the idea of their having a child in the next two years and their motivation to comply with each referent. Two years later 244 of the women were located again in order to determine whether they

actually had a child in the intervening period. The multiple correlation between the model's predictive components and actual birth was .51. The correlation between the components and birth or attempted birth was significantly larger 0.60. The second correlation is higher because not all women who tried to get pregnant were successful in doing so.

Werner, Middlestadt-Carter and Crawford (1975) found a correlation of .79 when 59 married women with two children were interviewed about their intention to have a third child during the next three years. Vinokur-Kaplan (1978) demonstrated a correspondance to actual family planning-building behaviour as well as intention. To assess behaviour the sample of 141 married couples were re-surveyed a year after the measurement of intention to have another child. The original multiple correlation between intention and the model's components was strong (R=.85). A year later the correlation between behaviour related to having another child (trying to become pregnant, enquiring about adoption, pregnancy or birth) and the model's components assessed the year before was also significant, (R=.42).

McCarty (1981) in an experiment designed to change contraceptive usage intentions found experimental evidence that supported the model. Similarily, Bogazzi's (1981) longitudinal study of blood donation provided support for the model. He

found that attitudes towards blood donation influenced blood donating behaviour only through their effect on donation intentions.

McArdle (1972) used the model to predict the behavioural intentions of heavy drinkers to sign up for treatment at the Alcohol Treatment Unit at a V.A. hospital. She obtained measures of the subjects' attitudes towards signing up for the treatment programme as well as their normative beliefs and motivation to comply with the referents' spouse; doctor; parents; clergymen; and close friends. The multiple correlation of attitudes and subjective norm with intention to join the programme was .76.

In two studies using the Prisoner's Dilemma game Ajzen and Fishbein (1973), Ajzen and Fishbein (1974) found that the number of times subjects choose the co-operative alternative was predicted from their intentions to choose that alternative. In the three games played, the correlations over all subjects were: .841; .897; and .822.

There is considerable evidence that people's intentions to vote for a given candidate are highly correlated with their self-report voting behaviours (e.g. Fishbein and Coombs, 1974, Fishbein and Feldman, 1963). For example, Fishbein and Coombs (1974) found that correlations between intentions to vote and actual voting in the 1964 Americal presidential

elections were .88 for Goldwater and .78 for Johnson. Other behavioural intentions predicted with success by the model include intention to perform various leisure time activities (Ajzen and Fishbein, 1969); cheating in college (DeVries and and Ajzen, 1971); and having a baby (Davidson and Jaccard, 1975).

The research has also indicated that both the attitude and subjective norm components uniquely contribute to the prediction of intentions. For instance, in predicting college students' intentions to engage in premarital sex. Fishbein (1966) found that for females, the attitude component was more important in determining intentions than the subjective norm, but for males the subjective norm was more important than the attitudes.

McCarty (1978) found that the intentions of males to use condoms was influenced by normative beliefs. The intentions of females to use oral contraceptives and the intentions of males to rely on a partner's use of oral contraceptives tended to be attitudinally determined.

Manstead, Proffit and Smart (1981) examined the applicability of Fishbein and Ajzen's theory of reasoned action to the prediction and understanding of how primiparous mothers intended to feed their infants (assessed antenatally) and how they actually fed their

infants during the six week postpartum period. The findings were broadly consistent witih the theory; intentions correlated highly (r=.81) with behaviour, and differential attitudes accounted for a sizable proportion (39.8%) of variation in intentions. However, Manstead et. al. found departures from what was anticipated on the basis of the theory of reasoned action. These researchers reasoned that these departures may have resulted from the way in which the predictor variables were measured. At a later date Manstead et. al. (1983) replicated their study on infant feeding behaviour modifying their measuring procedures to conform more closley to the specifications of the theory of reasoned action. In this study, both primiparous and multiparous mothers participated. The multiple correlation of the attitudinal and normative components with infant feeding intentions was .77 for both primiparous and multiparous mothers. However, they found the relative importance of the attitudinal and normative intentions differed across the two groups of mothers. Attitudinal factors were more influential than normative factors in shaping multiparous mothers' intentions whereas the two factors exerted approximately equal influence on the intentions of primiparous mothers. An analysis showed that mothers with direct experience of the criterion behaviour tended to have higher attitude-intention correlations and lower norm-intention correlations.

The ultimate goal of the theory of reasoned action is not only to predict intentions but to predict and understand the determinants of behaviour. In some of the studies mentioned above, behaviours as well as behavioural intentions were monitored. McArdle (1972) found that the correlation between intending to sign up for an alcohol treatment programme and actually signing up was 0.76. Similarily, Fishbein and Coombs (1974) found that the correlations between intending to vote in the 1964 American presidential elections were .89 for Goldwater and .78 for Johnson. More support for the model has been found in diverse areas as consummer psychology (Cohen, Fishbein and Ahtola, 1972); college enrolment (Pomazal, 1980); impression formation; (Jaccard and Fishbein, 1975).

To date several studies have used the Fishbein and Ajzen approach to the prediction of substance abuse. For example, Shegel, Crawford, and Sanborn (1977) indicated that the model's two components were sufficient to predict patterns of alcohol use by adolescents; Cook, Lounsbury, and Fontenelle (1980) similarily confirmed the predictive power of the model for the use of marijuanna, amphetamines and minor tranquilizers; Bentler and Speckart (1979) extended the model and applied it to a similar range of drugs and Beck and Davies (1980) showed the value of the approach for predicting smoking intentions and

behaviour after a persuasive anti-smoking communication. Pomazal and Brown (1977) similarily extended the approach to the analysis of belief and attitude change after persuasive appeal which was designed to make subjects' attitudes towards Tyrenol more positive.

Fishbein (1980) noted that, although a person's intention to perform a given behaviour is the best single predictor of whether or not the person will perform a given behaviour, predictions may be improved by measuring intentions (and/or the underlying attitudes and subjective norms) with respect to all of the person's alternative courses of action.

The importance of considering a person's beliefs about alternative courses of action may be especially important when attempting to predict habitual behaviours such as smoking, drinking, drug taking or gambling. For example, it has long been an embarrassment to attitude researchers who emphasize rational processes in behaviour, that millions of people agree that smoking can cause lung cancer but continue to smoke. If a group of people (smokers and non-smokers) were asked to list the negative consequences of smoking, both groups would list such outcomes as:- causes breathing problems; bad breath; expensive; causes clothes to smell stale, etc. According to the theory of reasoned action, however, how can some people continue to smoke cigarettes and

others do not? Fishbein and Ajzen argue that the answer lies in the consequences of not smoking by smokers and non-smokers. Non-smokers may list very positive consequences for not smoking but smokers may list very negative consequences e.g. become tense, anxious, lose concentration, gain weight, etc. Thus, a decision to smoke is quite reasonable if the decision maker believes that the net effects of smoking are more positive in relation to the effects of not smoking.

# CHAPTER TEN

# 10. CHANGING BELIEFS, ATTITUDES, NORMS AND BEHAVIOURS

## 10.1. Principles of Change

The previous chapter described the Fishbein-Ajzen theory of reasoned action and provided evidence for its applicability to explain and predict behaviour. As was mentioned earlier, however, the utility of the theory does not stop there. In addition to providing a framework for analysing the factors which underlie the decision to perform (or not to perform) a given behaviour it provides guidelines for developing educational strategies designed to change that particular behaviour. The present chapter will outline Fishbein and Ajzen's principles of change in accordance with their model of persuasive communication.

According to Fishbein and Ajzen, understanding the determinants of a specific behaviour is an essential first step in the development of successful educational interventions to change that behaviour. The more one knows about the factors underlying a decision to perform or not perform a given behaviour, the greater the probability that one can influence that decision.

Attempts to bring about change invariably involve

exposure to new information about some object, behaviour, issue, and event. Changes in beliefs resulting from such exposure provide the foundation on which rests the ultimate effectiveness of any influence attempt. Attempts to induce change in a given belief, attitude, intention, or behaviour must take into account the relation between the variable that has to be changed and the beliefs that are affected most immediately by the influence attempt. Attempts to produce change in a given variable can only lead to inconsistent findings if the beliefs underlying that variable are not understood.

## 10.2. The Role of Beliefs in Persuasive Communication

The notion of belief occupies a central role in the Fishbein-Ajzen conceptual structure. A person's belief is described as 'a probability judgement that links some object or concept to some attribute', (Fishbein and Ajzen, 1977). The terms object and attribute are used in a generic sense and both refer to any discriminable aspect of an individual's world. The content of a belief is defined by the object and the attribute in question and the strength of the belief is defined by the person's subjective probability that the object-attribute exists (or is true).

This conceptualization makes it clear that an

influence attempt, designed to change a person's behaviour, must be directed at one or more of the individual's beliefs underlying that behaviour.

Attempts to produce change in a dependent variable involves exposing the individual to information that is designed to produce the desired change. Under the strategy of persuasive communication this information is usually provided in the form of a written or oral message.

According to Fishbein and Ajzen, a persuasive message can be described primarily as a series of belief statements, each linking some object to some attribute, such as another object, a concept, an event, or a goal. Every object-attribute association to which an individual is exposed to is viewed by Fishbein and Ajzen (1975) as an 'informational item'. The individual's belief directly corresponding to an informational item is called a proximal belief. For example, the receiver of a persuasive communication may be exposed to the statement 'visiting the dentist at regular intervals guarantees a healthy smile'. This informations item links the object 'the dentist' to the attribute 'a healthy smile'. The corresponding proximal belief is the receiver's initial subjective probability concerning this attribute object link.

In many instances, the belief that is directly

attacked by an informational item does not serve as the dependent variable of interest. Instead, some other belief, or attitude, or intention, or behaviour, is the dependent variable that is to be changed. In fact, inferential beliefs, attitudes, and behaviours can be influenced only indirectly by changing one or more beliefs that serve as the primary determinants of these variables. According the Fishbein and Ajzen, one of the fundamental problems in any influence attempt, is the identification of those beliefs that need to be changed in order to influence the dependent variable under investigation. Such beliefs, which serve as the fundamental determinants of the dependent variable are called primary beliefs.

When the dependent variable of interest is attitude towards behaviour, for example, beliefs that associate the behaviour with attributes such as cost or consequences are some of the primary beliefs at which the influence attempt can be directed. When the dependent variable is an institution, the beliefs about that institution's characteristics or attributes are the beliefs at which the influence attempt can be directed. The belief at which the influence attempt is directed are called target beliefs. If an influence attempt is designed to change target beliefs that are unrelated to the dependent variable's primary beliefs, the influence attempt will be ineffective.

To summarize what has been discussed thus far,

according to Fishbein and Ajzen, a persuasive communication comprises, for the most part, of a set of belief statements designed to change some dependent variable. The influence attempt is directed at certain target beliefs that are assumed (or have been empirically determined) to be the primary determinants of the dependent variable in question. Changing target beliefs will influence the dependent variable only when this assumption is met. To produce the desired changes in target beliefs, the subject must be exposed to a set of informational items. Resulting changes in the receiver's primary beliefs may initiate a chain of effects, ultimately leading to changes in the dependent variable. Fishbein and Ajzen (1975) state that it is possible that a communication may produce changes in external beliefs, i.e. beliefs that do not correspond to the information items provided by the message. An example may illustrate this point. James, who is a heavy drug user, hears an anti-drug taking message that argues that drugs cause anti-social behaviour. James knows that his new girlfriend despises violence, and he reasons that his girlfriend also despises drug users. Because of James's strong desire to comply (MC) with his girlfriend's wishes (NB) it is possible that James's intention to take drugs might significantly decrease, even though the message might be unsuccessful in changing James's attitude about drug taking. This points out that, in research, the choice of a dependent measure of

influence is extremely important. Although the message was an attempt to change James's attitude by getting him to associate a negative attribute (violence) with drug taking, the message actually had an impact on an external belief - a subjective norm in this case. Since, according to Fishbein and Ajzen's model, subjective norms are a component of behavioural intentions and not of attitudes, a message of intentions would be more likely to show an effect of the message than a measure of attitudes (assuming that the nature of one's violent behaviour was not a relevant primary belief underlying James's attitude towards taking drugs).

## 10.3. Factors That Influence the Likelihood That the Beliefs in a Persuasion Message Will Change the Audience's Beliefs

Fishbein and Ajzen have speculated about factors that influence the likelihood that the beliefs in a persuasive message will change the audience's beliefs. One factor that should clearly influence the probability that a source belief will be accepted is the discrepancy between the probability implied by the source belief, i.e. source probability (ps), and the

receiver's proximal probability (pr). The greater the discrepancy from the person's own position, the less likely the person is to accept it: p(a)=1-D where p(a) is the probability of acceptance and D is the absolute discrepancy between source and proximal probabilities.

Many other variables other than discrepancy may influence probability of acceptance. In any given persuasion situation other facilitating factors may affect the likelihood of accepting any particular advocated belief. Generally speaking, these factors can have one or both of two effects i.e. (1) they can influence the person's confidence in his own belief i.e. his proximal probability and/or (2) they can influence the person's judgement that the source probability is correct. These facillitating (or inhibiting) factors may be associated with the communicator (e.g. source credibility), the message (e.g. the type of arguments employed) or the receiver (e.g. recipient intelligence).

Although Fishbein and Ajzen do not stipulate any specific formulation, they assume that the different types of facilitating factors combine in some fashion to produce an overall level of facilitation as shown in Equation 6 below:

$$p(a)=(1- D)/f;f>0.$$

This equation generates a family of acceptance curves.

The argument is that as the overall facilitating factors decline (e.g. the source becomes less credible) the probability of acceptance is hypothesized to decrease dramatically with increasing discrepancy. On the other hand, as facilitation reaches very high levels, the probability of acceptance remains very high, even at very large discrepancy levels.

Although the equation above specifies that the probability of completely accepting a source's belief is an inverse function of discrepancy, the potential amount of change that can be produced in a subject's belief is a direct function of discrepancy. In other words, the more discrepant the advocated position, the more potential there is for change. Considering both of these observations, Fishbein and Ajzen (1975) contend that actual change (c) in the advocated position is a function of potential change (as indexed by discrepancy) and the probability of complete acceptance. This is shown in Equation 7 below:

Equation 7: $c=p(a)D$.

## 10.4. Changing Beliefs

According to Fishbein and Ajzen (1975), a person may form a belief by observing an object-attribute relation or accepting information to the effect that the object has the attribute; or he/she may form a belief indirectly by means of some inference process.

Inferential beliefs are formed on the basis of other beliefs that the individual holds. Change in an inferential belief can, therefore, be brought about by changing some or all of the relevant (primary) beliefs that provide the basis for the inference process.

An individual may arrive at a given belief in various ways. As an example, consider the belief 'Peter is dangerous'. Since dangerousness cannot always be directly observed, the only way a person can acquire this belief directly is by accepting information from some outside source. However, there are a number of inference processes whereby a person may arrive at the same belief. For example, the person may first form the belief that Peter attacked a friend one evening, either, by directly seeing the incident, or, by accepting information that this attack occurred. Alternatively, the person may reach this inference on the basis of syllogistic reasoning. If it is assumed that the person held a prior belief that people who attack other people are dangerous, he/she might reason as follows, 'Peter attacked another person; people who attack other people are dangerous therefore Peter is dangerous'.

## 10.5. Changing Attitudes

As was discussed in the previous chapter, for Fishbein and Ajzen (1975), attitudes towards an object

are determined by a person's salient beliefs that the object possess certain attributes and by his evaluations of those attributes. Thus, according to these theorists, attitudes can be changed by changing one or more of the existing salient beliefs, by introducing new salient beliefs, or by changing the person's evaluations of those attributes. Beliefs about the object and attribute evaluations can therefore be viewed as two different determinants of attitude at which an influence attempt can be directed.

The first major problem in an influence attempt directed at changing attitude consists in identifying the primary beliefs underlying that attitude. According the Fishbein and Ajzen (1975) any belief that associates the attitude object with some other object, concept or property, and that is part of the person's salient belief hierarchy, constitutes a primary belief. It is important to note that the object of the primary belief is exactly the same as the object of the attitude which is to be changed.

Consider, for example, a hypothetical influence attempt designed to change attitudes towards drinking. Salient beliefs linking drinking to such attributes as possible loss of job, lack of money, cirrhosis of the liver, may be appropriate target beliefs and would therefore constitute appropriate target beliefs. If these same attributes were associated with a

particular alcoholic beverage such as gin, we would obtain beliefs about gin, such as 'gin was mother's ruin', 'gin tastes like perfume', 'gin causes me to have terrible hangovers'. Although these associations may constitute appropriate target beliefs for changing attitudes towards gin, they do not serve as primary beliefs with respect to attitudes towards alcohol per se. In fact, they may be completely unrelated to the primary beliefs about alcohol.

Fishbein and Ajzen argue that lack of consideration in the selection of the appropriate target beliefs in an influence attempt is one of the main reasons for the failure to influence attitudes. Attitude change is expected only if the target beliefs are initially part of the subject's salient belief hierarchy.

Fishbein and Ajzen point out that appropriate target beliefs may represent only part of the primary beliefs determining a given attitude. Hence, an influence attempt may have an effect, not only on target beliefs, but also on other primary beliefs about the attitude object, and these impact effects may be responsible, in part, for the obtained attitude change. Similarily, the influence attempt may have impact effects on the evaluation of attributes accociated with the primary beliefs, which may also influence the amount of attitude change obtained. A

study by Lutz (1975) may serve as an illustration of the effects of an influence attempt directed at beliefs about an attitude object. This investigator examined the effects of manipulating different kinds of target beliefs on attitudes towards using a hypothetical washing powder. First Lutz obtained a list of modal salient beliefs by means of free-elicitation procedure. Employing four experimental conditions, he then attempted to increase or decrease one of these primary beliefs that linked the washing powder with either a positive or negative outcome. Depending on their initial beliefs, subjects were told either that the washing powder could or that it could not be used in all temperatures; in the remaining two conditions, subjects were told that using the washing powder was or was not costly.

In addition to assessing the influence attempt's effect on the target belief, Lutz also measured its impact on nine other (primary) beliefs about using the washing powder. He found that attitude change could be predicted by considering changes in target and external beliefs. In all four conditions, the influence attempt produced the desired change in target belief. This change in target belief, taking into account attribute evaluation, showed a correlation of .41 with change in attitude towards using the washing powder. However, the influence attempt was also found to have a significant impact effect on some of the primary external beliefs and on

their attribute evaluations. When this impact effect was considered in addition to the change in target belief, the correlation with attitude change was a function of both the direction of belief change and of attribute evaluation. Increasing a person's belief that the washing powder can be used in all temperatures, or, decreasing his/her belief that using the washing powder was costly, led to a more favourable attitude, whereas changing those beliefs in the opposite direction produced less favourable attitudes.

## 10.6. Changing Evaluations

Fishbein and Ajzen argue that in place of attacking a person's belief that an object has certain attributes, the investigator may attempt to change the evaluations of some of those attributes. It may be recalled that, according to Fishbein and Ajzen (1975) a person's evaluation of an attribute represents his/her attitude towards that attribute. It follows that, changing his/her evaluation of a given attribute requires changing his/her primary beliefs about that attribute's characteristics or his/her evaluations of those characteristics.

In sum, attitudes can be changed by attacking beliefs that the object has certain attributes, or by influencing evaluations of those attributes. In order

to understand the effects of an influence attempt on a dependent measure of attitude, one must know its effects on the person's salient belief hierarchy. It may be recalled from the previous chapter that, within the Fishbein-Ajzen conceptual framework, attitude (A) is viewed as determined by the sum of the person's salient beliefs about an object's attributes (b) multiplied by his evaluations (e) of these attributes as shown in Equation 8 below:

Equation 8: $A=\sum b_i e_i$

It follows that attitude change will be obtained only when the influence attempt succeeds in changing the sum of the cross product, ( $b_i e_i$ ).

## 10.7. Changing Intentions to Perform a Specific Behaviour

An intention is described by Fishbein and Ajzen (1975) as the probalility judgement that links the individual to some action. An intention can be viewed as the person's belief about his or her own performance of a given behaviour. Intentions can be general (e.g. I will stop taking heroin) or specific (e.g. I will not take heroin at Tom's house tonight). It is usually assumed that changing certain beliefs will have an effect on a person's intention to perform a given behaviour.

As was discussed in the previous chapter,

according to Fishbein and Ajzen, a person's intention to perform a given behaviour is determined by his/her attitude towards the behaviour and his subjective norm with respect to that behaviour. Fishbein and Ajzen's model for predicting intentions is presented in Equation 9 below:

Equation 9: $I=(A)w_1+(SN)w_2$

Attitude towards the behaviour and the subjective norm thus, represent the two immediate determinants of intentions. The effects of an attempt to influence intentions depend on its effect on these attitudinal and normative components; the amount of change in intention produced by a change in one of the component's is a function of the components relative weights in determining the intention. An influence attempt directed at any other variable will be effective in changing intention only to the extent that it influences one or the other of the two components that serve as the determinant of that intention.

## 10.8. Changing the Attitudinal Component of Intention

In the preceding section the procedures involved in changing attitudes were discussed. It follows that attitude towards a behaviour can be influenced by changing salient beliefs about a particular behaviour or by changing evaluations associated with these

beliefs.

## 10.9. Changing a Subjective Norm

As may be recalled from the previous chapter, a person's subjective norm was viewed as a function of his/her normative beliefs that particular referents, relevant for the behaviour in question, think he/she should or should not perform a particular behaviour, weighted by his motivation to comply with each referent. This formulation implies that the subjective norm can be changed by attacking either the specific normative belief or the motivation to comply with a given referent. The principles involved in changing beliefs can be applied directly to normative beliefs. As in the case of attitudes, a change with respect to one normative belief or a change in motivation to comply with a given referent may or may not influence subjective norms. Only when the weighted sum of normative belief times motivation to comply changes will a change in the subjective norm follow.

As was stated above, attempts to change either the attitudinal or the normative component must, in the final analysis, be directed at certain primary beliefs. When attitude towards a behaviour is to be changed, these beliefs are concerned with the kinds of outcomes provided by the behaviour or with the characteristics of these outcomes. In the case of

subjective norm, the primary beliefs may be the norm itself, or they may be beliefs about the expectations of relevant referents, their attitudes, their behaviour, or their power.

## 10.10. The Role of Weights in Changing Intentions

The discussion of the Fishbein-Ajzen model of persuasive communication indicated that intention could be changed by attacking either attitudes towards the behaviour or the subjective norm. However, as was mentioned earlier, these two determinants may not be equally relevant for the intention under consideration. An influence attempt may have little effect on intention if the component attacked does not carry a significant weight.

## 10.11. Changing Behaviour

Within the Fishbein-Ajzen framework, the immediate determinant of a given behaviour is the intention to perform that behaviour. To change a person's behaviour, it is therefore necessary to change his/her intention to perform the behaviour; the process was described in the previous section.

In sum, the Fishbein-Ajzen model of persuasive communication states that, in order to change a behaviour, an influence attempt should be directed at

the intention to perform that behaviour. To change that intention, however, it will be necessary to focus on attitude towards the behaviour or the subjective norms. Attitudes towards the behaviour, or any other attitude, can be changed by influencing primary beliefs about the attitude object, or by the evaluations of its attributes. The latter variable, however, is also determined by beliefs, namely primary beliefs about the attributes, Similarily, if subjective norms were to be changed, the determinants would be primary normative beliefs and motivation to comply. Changing the latter variable again requires that certain primary beliefs be attacked.

## 10.12. Construction of Persuasive Appeals

To conclude this chapter on the principles of change it is necessary to highlight the Fishbein-Ajzen technique for the construction of successful persuasive messages.

The relative effectiveness of various types of appeals have been examined by investigators over the years. Studies have compared 'rational' to 'emotional' messages, 'high fear' appeals to 'low fear' appeals, 'one sided' to 'two sided' communications, stating the conclusion of a message to leaving it unsaid, and order of presenting the argument to another. None of these variables has been found to have consistent and replicable effects on the

persuasiveness of the message, (see chapter 8).

Fishbein and Ajzen (1975) argue that it is important to note that, except for a manipulation consisting solely of a change in order of presentation, all message manipulations also manipulate (i.e. change) the kind or amount of information to which the receivers are exposed. Consider, for example, two messages designed to create different levels of fear about drinking alcohol. One message argues that drinking leaves a bad taste in one's mouth, causes hangovers, is expensive. The other claims that drinking leads to heart attacks, liver failure, cancer of the liver, and shortens one's life expectancy. The second message contains more belief statements than the first and it provides different information about drinking alcohol by linking this behaviour to different outcome consequences. Clearly, these outcomes differ, not only in their denotative meaning, but also in their evaluation. Thus, according to Fishbein and Ajzen, any manipulation that varies the nature of the message involves variations in the number or kind of belief statements presented, as well as in the evaluations of associated attributes. Thus, if a high fear appeal is found to produce more change (or less change) than a low fear appeal, this effect may be due to the differences in the content of the high and low fear messages.

It follows from the above, that by carefully selecting the arguments and supportive evidence found in the different types of appeals, it should be possible to construct a high fear appeal that will be more effective than a low fear appeal or vice versa. The same considerations apply to logical versus emotional appeals and one-sided versus two sided messages.

One of the problems in research in communication and persuasion is that arguments used in the appeal are usually selected, not on the basis of a systematic and empirically validated theory, but quite arbitrary on the basis of intuition and often fallacious assumptions. The effectiveness of a message depends, not upon whether it is 'rational' or 'emotional' or 'high' or 'low' fear, but upon its content's ability to directly or indirectly affect those beliefs that serve the determinants of the decision in question.

To summarize Fishbein and Ajzen's principles of change: an influence attempt is designed to change a given dependent variable by providing informational items that correspond to, and may affect, certain proximal beliefs. An influence attempt will produce change in these proximal beliefs if the informational items are perceived and accepted. Even it not accepted, the informational items may produce changes in external beliefs and are expected to influence

certain primary beliefs which constitute or are related to the immediate determinants of the dependent variable under consideration.

Similar considerations apply to an understanding of the effects of experimental manipulations on the dependent variable. To influence the amount of change in the dependent variable, the manipulations must first have an effect on the amount of change in proximal and external beliefs. The manipulations may itself introduce informational items in the situation or it may influence the perception and acceptance of the information. Its ultimate effect on the dependent variable will depend on the processes intervening between the the presentation of information and the dependent variable.

According to Fishbein and Ajzen (1975) very little attention has been paid to problems of specifying the appropriate beliefs, or to the processes mediating between these beliefs and the dependent variable. Most studies of 'attitude change' have manipulated some independent variable and have simply measured some dependent variable. They state that, given this, it is hardly surprising that research in this area has led to a large body of inconsistent and inconclusive findings.

# CHAPTER ELEVEN

# 11. EXPERIMENT 111: AN APPLICATION OF THE FISHBEIN-AJZEN MODEL OF PERSUASIVE COMMUNICATION TO HEROIN TAKING BEHAVIOUR

## 11.1. Introduction

In the previous two chapters the reader was introduced to Fishbein and Ajzen's theory of reasoned action and their model of persuasive communication. The experiment to follow will consist of a series of three studies which will be an application of the Fishbein-Ajzen approach to heroin using behaviour.

Fishbein and Middlestadt (1987) argue that it is reasonable to assume that, like cigarette smoking, many aspects of illicit drug use are under volitional control. Given an identified behaviour which can be reasonably assumed to be under volitional control, the Fishbein-Ajzen theory hypothesises that the immediate determinant of that behaviour is the person's intention to perform (or not to perform) that behaviour. It follows from this that one should be able to reduce heroin use by lowering current heroin users' intentions to use the drug and/or, by increasing their intentions to stop using the drug within some given time period.

The model states that intention to perform a

given behaviour is a joint function of attitudes towards the behaviour and the subjective norms which govern the situation. The identification of the relative weights of these two components is very important for developing intervention programmes directed at changing behaviour.

Thus, the first step in this application of the Fishbein-Ajzen model of persuasive communication to heroin use is the identification of the relative importance of attitudes and subjective norms underlying current heroin users' intentions to use heroin. Given this information, it should be possible to change current heroin users' intentions to use heroin by developing a strategy that takes into account the relative importance of these two components.

## 11.2. Experiment 111: Study (a): Determining the Relative Importance of the Attitudinal and the Normative Components in Heroin Using Behaviour

A pre-study was conducted to determine the relative weight of the above two variables in determing heroin users' intentions to use heroin.

## 11.3. Method

Subjects. 11 subjects, all male, took part in this investigation. Subjects' ages ranged from 16

years to 25 years (mean age 19 years) and were all obtained from ECODA Drug Centre, Easterhouse, Glasgow. All but one of the subjects were unemployed.

Material. A measure of attitudes was obtained by using a semantic differential evaluative scale scored from 1 to 7, (Osgood, Suci, and Tannenbaum, 1957).

A measure of subjective norms was obtained (following the recommendations of Fishbein and Ajzen 1975) by a 7-point bi-polar 'I should.....I should not' dimension. Selection of referents for this part of the study was based, in part, on experience with heroin users and on the general normative referents suggested by Fishbein and Ajzen, (1975).

Intention measures were assessed with a single 7-point 'unlikely.....likely' scale. High scores indicated positive intentions. An example of the questionnaire appears in Appendix 5.

Procedure. Subjects were told that the experiment was interested in heroin users' attitudes towards taking heroin. To assist with this study, participants were asked to complete the questionnaire and to indicate their intentions with respect to heroin use in the next three months. The questionnaire took approximately 10 minutes to

complete and all subjects were assured anonymity.

## 11.4. Results: Experiment 111: study (a)

Intentions of the heroin users were regressed on attitude and subjective norm measures, the two variables being entered into the regression equation simultaneously. The result of this analysis is shown in Table 19 below.

Table 19: Heroin Users: Regression of Intentions on Attitudes and Subjective Norms

| Step | Predictor Variable | B | SErB | Beta | t | sig t |
|---|---|---|---|---|---|---|
| 1 | attitudes | .26 | .11 | .57 | 2.3 | .04 |
| 2 | subjective norms | .29 | .19 | .36 | 1.5 | .16 |
| | (constant) | -7.62 | 6.36 | | -1.19 | .26 |

From Table 19 it can be seen that the attitudinal constituent is more influential ($t=2.3$, $p<0.04$) than the subjective norm constituent ($t=1.5$, ns) in shaping heroin users' intentions to use heroin. The attitudinal constituent accounted for 43% of the variance. Adding the subjective norm constituent only accounted for 12% more of the variance. Thus, it is the attitudinal constituent which must be attacked by an influence attempt in order to change current heroin

users' intentions to use heroin. This finding is consistent with McArdle's (1972) finding that intentions of problem drinkers to sign up for an Alcohol Treatment Programme was primarily determined by the attitudinal constituent.

An influence attempt is designed to change some dependent variable whether it is a belief, an attitude, an intention or a behaviour. Attempts to bring about a change invariably involve exposure to new information (written, pictorial or verbal) about some object, behaviour, or issue. Armed with the knowledge that current heroin users' intentions to use heroin are under attitudinal control, it follows that it should be possible to change these intentions by changing the attitudinal component. This finding takes us to the second stage in this application of the Fishbein-Ajzen model of persuasive communication to heroin taking behaviour.

According to Fishbein and Ajzen (1975), the first step involved in changing a person's attitude towards a behaviour is to change one or more existing salient beliefs which the person holds about performing the behaviour. This is done by either introducing new salient beliefs or by changing a person's evaluations about these beliefs.

But, before existing salient beliefs can be changed, it is necessary to know the salient primary

beliefs on which the attitude is based and then to construct a message that provides information, either to change a person's subjective probability that the attitude object has certain attributes, or, to influence the evaluations of those attributes. (Likewise, a subjective norm can be changed by attacking, either the specific normative beliefs relevant to important reference persons, or, the motivation to comply with a given referent). By changing the beliefs underlying either attitude or subjective norm, change in behavioural intention, and thus, behaviour, could also be induced (Ajzen, 1971; Ajzen and Fishbein, 1972).

Thus, the second major problem to overcome in a persuasive attempt consists of identifying the primary salient beliefs for a given attitude. The salient beliefs that underlie a given attitude can be ascertained by eliciting beliefs from a representative sample of the population of interest; the beliefs most frequently elicited by this sample of respondents constitute the modal set for the population in question. This will be the task of the next study.

## 11.5. Experiment 111: study (b): Elicitation of Modal Salient Beliefs Underlying Heroin Using Behaviour

## 11.6. Method

Subjects. The sample consisted of 15 current heroin users, (11 male and 4 female) who had not been involved in any drug research conducted to date by this thesis. Subjects' ages ranged from 20 years to 37 years (mean age 22 years) and were obtained from the St. Enoch Society and Possil Drug Clinic. 81% of the population were unemployed and all had been using heroin for 4 years or more.

Procedure. Subjects were informed that the study was an investigation into determining the advantages and disadvantages heroin users associate with using heroin. To ensure that subjects listed both advantages and disadvantages both of these variables were asked separately. In addition to obtaining a set of modal salient beliefs which constitute attitude, a list of subjective norms was also elicited from subjects. Subjects were asked to list people whom they regarded as being important to them. Each belief and subjective norm was listed as the subject reported it. To ensure that each subject listed his/her own salient beliefs, all subjects were

interviewed individually. All interviews were conducted at the clinic of contact. As no names were required for this study, all subjects were assured anonymity.

## 11.7. Results: Experiment 111: Study (b)

Table 20 below shows the list of salient beliefs elicited from respondents.

Table 20: Elicited Salient Beliefs

| Disadvantages | Frequency | |
|---|---|---|
| lose appetite | 33.3% | (5) |
| makes me sick | 6.6% | (1) |
| damages my liver | 26.6% | (4) |
| rots my teeth | 40% | (6) |
| causes abscesses | 26.4% | (4) |
| causes eye damage | 33.3% | (5) |
| causes premature death | 60% | (9) |
| causes financial problems | 53.3% | (8) |
| may lose limb | 20% | (3) |
| causes ugly scars | 33.3% | (5) |
| causes hepatitis | 26.6% | (4) |
| lose interest in the opposite sex | 33.3% | (5) |
| cause fight with family | 33.3% | (5) |
| causes AIDS | 33.3% | (5) |
| reason for crime | 26.6% | (4) |
| can't move away | 23.3% | (5) |
| split up with partner | 26.6% | (4) |
| cause of involvement with the police | 26.6% | (4) |
| has adverse effect on social life | 26.6% | (4) |
| cause of loss of friends | 33.3% | (5) |
| cause of being unemployed | 33.3% | (5) |
| **Advantages** | | |
| can relate better to others | 26.6% | (4) |
| feel less anxious | 53.3% | (8) |
| enjoy social occasions more | 40% | (6) |
| feel more confident | 40% | (6) |
| relieves boredom | 46.6% | (7) |
| **Subjective Norms** | | |
| people in general | 26.6% | (4) |
| partner | 66.6% | (10) |

| | | |
|---|---|---|
| parents | 60% | (9) |
| doctor | 26.6% | (4) |
| close friends | 26.6% | (4) |

The decision to be made about a set of elicited beliefs concerns which of these beliefs are to be included in the modal salient set. Ajzen and Fishbein (1980) suggests that an adequate selection procedure for determining a set of modal beliefs is to include all beliefs mentioned by 10% of the sample. To achieve this criterion the belief 'heroin makes me sick' was omitted from the elicited set. Table 21 below lists the set of modal beliefs underlying the attitudes of heroin users towards using heroin as identified by this analysis.

Table 21: Identified Modal Beliefs.

| Number | Belief | Frequency |
|---|---|---|
| (H) 1 | causes premature death | (60%) |
| (S) 2 | cause of financial problems | (53.3%) |
| (A) 3 | feel less anxious | (53.3%) |
| (A) 4 | relieves boredom | (46.4%) |
| (H) 5 | rots teeth | (40%) |
| (A) 6 | enjoy social occasions more | (40%) |
| (A) 7 | feel more confident | (33.3%) |
| (H) 8 | lose weight | (33.3%) |
| (H) 9 | causes eye damage | (33.3%) |
| (H) 10 | causes ugly scars | (33.3%) |
| (S) 11 | lose interest in the opposite sex | (33.3%) |
| (S) 12 | causes fights with family | (33.3%) |
| (H) 13 | causes AIDS | (33.3%) |
| (S) 14 | can't move away | (33.3%) |
| (S) 22 | cause of loss of friends | (33.3%) |
| (S) 23 | split up with partner | (33.3%) |
| (S) 16 | cause of being unemployed | (33.3%) |
| (S) 15 | has adverse effects on social life | (26.6%) |
| (H) 17 | cause of damage to liver | (26.6%) |
| (H) 18 | causes abscesses | (26.6%) |
| (S) 19 | cause of involvement with the police | (26.6%) |
| (H) 20 | causes hepatitis | (26.4%) |
| (S) 21 | reason for crime | (26.6%) |
| (A) 24 | can relate better to others | (26.6%) |

| | | |
|---|---|---|
| (H) 25 | may lose a limb | (20%) |

Subjective Norms

| | | |
|---|---|---|
| 1 | partner | (66.6%) |
| 2 | parents | (60%) |
| 3 | close friends | (26.6%) |
| 4 | doctor | (26.6%) |
| 5 | people in general | (26.6%) |

(H designates a health consequence)
(S designates a social consequence)
(A designates an advantage consequence)

From table 21 it can be seen that the salient beliefs held by heroin users regarding the consequences of using heroin fall into two distinct main categories; a health category and a social category.

What is perhaps most striking from the above table is the large number of beliefs (10 beliefs) referring directly or indirectly to interpersonal retalions, (e.g. lose interest in the opposite sex, loss of friends, etc.). This finding makes it clear that heroin users' beliefs about the disadvantages of using heroin are not based primarily on health considerations. Also surprising is the finding that, although the most frequentlty elicited salient belief was one concerning health, (i.e. cause of premature death) the second two most frequently elicited beliefs are of a social type, (i.e. cause of financial problems, feel less anxious). This finding suggests that social consequences are just as important as health consequences for those using heroin. Equally

surprising is the finding that fear of contracting AIDS features relatively low in the frequency ladder. This suggests that, for many heroin users (more than half the sample for this particular group), the association between taking heroin and contracting AIDS had not established itself strongly enough, in many heroin users' cognitive structures to be a primary salient belief underlying their heroin taking behaviour.

The aim of the following study is to attempt to change current heroin users' attitudes and intentions with regard to using heroin in the following three months by means of persuasive communication. The salient beliefs elicited from the present study will be used to construct the persuasive appeals. These beliefs will also be incorporated into an attitude questionnaire on which heroin users' attitudes and intentions, with regard to heroin use, will be measured.

## 11.8. Changing Heroin Users' Attitudes Towards Using Heroin

As stated earlier, Fishbein and Ajzen's model claims that to change an attitude by means of persuasive communication, it is necessary to change one or more of the person's existing salient beliefs

associated with the attitude or change the person's evaluation of the attributes associated with the attitude. This can be achieved by presenting a persuasive message consisting of source beliefs constructed from previously identified modal salient beliefs. To be successful, these source beliefs must be either discrepant from the modal salient beliefs held by the individual about the consequences of engaging in a particular behaviour or must contain more negative evaluations of the consequeces of engaging in that behaviour than is presently recognised by the person.

## 11.9. Construction of the Persuasive Appeals

As was established from the identification and organization of the modal salient beliefs, (Tables 20 and 21), heroin users' salient beliefs consists mainly of two distinct types: (a) health beliefs and (b) social beliefs. It was therefore decided that two different types of persuasive appeals would be constructed, one heavily emphasising negative health consequences associated with heroin use and the other heavily emphasising negative social consequences associated with heroin use.

The messages were designed to influence the health attitudinal component and the social attitudinal component. In accordance with Fishbein and Ajzen's (1975) suggestion that to be successful, a

persuasive appeal must be discrepant from the recipients salient beliefs. New information on the consequences of using heroin was provided by making the previously recognised consequences more negative. The messages focused on attitudes towards using heroin.

The appeal designed to emphasise negative health consequences was very similar to the fear appeal approach typical of certain types of health education. Consequently, this appeal will be referred to as the 'fear appeal'. The appeal designed to emphasise negative social consequences will be referred to as the 'social appeal'.

In order to avoid the criticism that any changes found in attitudes after exposure to a specific persuasion appeal could be attributed to the amount of words which constitute the message, both messages were constructed from approximately the same number of words. The two constructed persuasion messages are presented below.

## 11.10. FEAR APPEAL

The fact is, drugs kill and maim. Every year, drugs are responsible for untold physical pain, suffering and death. Today in Scotland illicit drugs are more readily available than ever before, and the misuse of hard drugs, particularily heroin, has increased substantially in the last 4 to 5 years. Accompaning this increase in availability is an upsurge of alarm and anger over the vulnerability of young

people. More youngsters are becoming involved in drugs and putting themselves at risk of serious physical and psychological harm, and damage to the physical and psychological health of those who become addicted to drugs is both serious and lasting. Harmful substances are easily obtained by all age groups from primary school onwards. In 1986 about two thirds of new notified addicts were under 20 years of age. Year by year the peddlers in misery destroy tens of thousands of lives and lead others into a drug hell.

With persistent and regular drug use, tolerance develops. This means that the addict has to use larger and larger amounts of the drug to get the effect that he or she craves. When the drug is withdrawn or reduced, withdrawal symptoms occur. With heroin, the addict experiences severe muscle cramps, nausea spasms, hallucinations, sweating fits, and nights of sleepless agony. Addiction is a vicious spiral from which there is no escape. The addict requires more and more money to support his or her growing addiction, thereby facing increasingly serious problems with police, family life, and with all aspects of day to day living. The end is complete physical and mental disintigration.

It is a known fact that drug experimentation leads to addiction to hard drugs. The increasing misuse of hard drugs like heroin is cause for particular concern. As if such drugs were not sufficiently dangerous in themselves, they are often 'cut' (mixed) with other substances of unknown origin, many of which are themselves toxic. When injected, these substances can cause blood clots, damage to arteries and veins, loss of a limb, blindness and death. Clumsy or repeated injections can cause abscesses and collapsed veins.

Drug addicts who share needles are at risk of contracting hepatitis. When this virus reaches the liver it grows and multiplies. The end result is chronic injury to the liver and possible eventual cancer. Intravenous drug addicts also run a very high risk of contracting Acquired Immunodeficiency Syndrome (AIDS). If the AIDS virus is contracted the addict's immune defense system is struck a critical blow. He or she becomes highly susceptible to all manner of infections and diseases, most of which would not normally cause any problems for a non-infected person. No organ of the body is safe from the infection. There are many manifestations of the deficiency; the gastro-intestinal system being a common site for the growth of painful tumours. These cancers can arise anywhere in the gastro-intestinal tract from the mouth to the anus. Treatment of the ailments is always very painful. Victims do not recover from their immunodeficiency, they may recover from one specific infection only to develop another. The average survival rate for an AIDS victim is only nine months from diagnosis to death.

There is no doubt that the disease of drug

addiction is spreading. Even if the deadly syringe does not kill or maim you, and you somehow avoid AIDS and hepatitis, make no mistake: drug use is a one-way street. It leads only to mental and physical decline, the gutter, and ultimately death.

## DRUGS LEAVE YOU AS GOOD AS DEAD

## 11.11. SOCIAL APPEAL

A great deal of ill-informed and erroneous information surrounds the topic of drug abuse. Clearly, using illicit drugs in not going to improve anyone's health and well-being, but for most users, the effects of drugs are likely to be limited rather than catastrophic.

Probably the most common reasons for using drugs are curiosity to begin with and pleasure thereafter. Some people use drugs to relieve stress or solve problems, but most drug use is casual and does not reflect profound stress. Others simply use drugs because they are available or because they are mysterious. Young people in particular may be attracted to what they believe to be excitement and risk associated with drugs; but even here studies have shown that drug use is usually a temporary phase. In follow-up studies a substantial proportion of young drug users were found to spontaneously give up their habit a few years later.

Not all users of illicit drugs are dependent or 'addicted', but even for those who are, the health risks arising from the drug itself may still be relatively slight, provided adequate precautions are taken over conditions of administration, (non-sterile needles and impure drugs are two major causes of illness amongst drug users). Even if a person does become dependent an a drug, withdrawal symptoms are not as agonising, nor as difficult to cope with as the media would have people believe. Most people coming off heroin, for instance, usually feel as though they have a dose of the flu accompanied by some sleeplessness. This usually passes within a few days.

It is sensible, however, to consider the real cost of illicit drug use, in social and economic terms. Firstly, the non-medical use of proscribed drugs is against the law. It is likely that a drug habit will, sooner or later, lead to involvement with the police and to subsequent prosecution. Furthermore, the problems of financing a drug habit means that, for some users, drug use becomes dependent on a whole 'grey economy' entailing activities such as housebreaking, shoplifting, resetting and prostitution.

Sentences against the Misuse of Drugs Act may be severe. For a first offence relating to class B drugs (e.g. cannabis) the sentence may be only a fine, but for offences relating to class A drugs (e.g. heroin) there can be jail sentences of from seven to fourteen years. The impact of such jail sentences on the

individual and on his or her immediate family can be devastating.

Even when there is no police involvement, people who become dependent on drugs tend to neglect their families, their work and their responsibilities. All too often the families and loved ones of dependent drug users are the ones who bear the full cost.

Family responsibilities are neglected; children are lost or taken into care; friendships are severed because close friends become suspicious and unsure of drug-using friends. It is often the case that habitual drug users end up living lonely lives with only other drug users for company.

Economic hardship arises as a consequence of maintaining a drug habit. The cost of maintaining such a habit should not be underestimated. The real price is, on the one hand, loss of self respect, self esteem and self potential, and on the other hand, the break-up of those relationships which form the basis for happy and successful living.

**DRUGS ARE A POOR SUBSTITUTE FOR FAMILY AND FRIENDS**

## 11.12. Construction of the Attitude Questionnaire

The attitude questionnaire construction was based on the set of modal beliefs previously identified (see Table 21, chapter 11). Beliefs were incorporated into statements. Each statement was designed to measure subjects' belief strengths about the consequences associated with using heroin and evaluations of these consequences. The scales employed were similar to those developed by Fishbein and his associates (Fishbien and Ajzen, 1971; Jaccard and Davidson, 1972).

Health attitudes towards using heroin were assessed with the 10 health beliefs elicited as being the consequences of using heroin, and an evaluation of each belief. Social attitudes towards using heroin were assessed with the 10 social beliefs elicited as being the consequences of using heroin, and an evaluation of each belief. Since heroin users believe that taking heroin has advantageous consequences, a measure of advantage attitudes was also obtained. Advantage attitudes towards using heroin were assessed with the advantage beliefs elicited as being advantageous consequences of using heroin and evaluations of these consequences. The rationale underlying the inclusion of these five items in the analysis of attitude is to determine whether any one

appeal would be more effective than the other in reducing the beliefs' strength of the advantages of using heroin.

The 7-point bipolar belief scales were scored from 1 to 7 on an 'unlikely - likely' dimension. Evaluations were scored on a -3 to +3 'good - bad' dimension.

A measure of normative beliefs was obtained by assessing subjects' perceived opinions of the five normative referents (identified by heroin users as being important to them) towards the subjects using heroin. The opinion of each referent was assessed with a 7-point 'should - should not' dimension scored form 1 to 7. Motivation to comply with each referent was assessed on a 7-point 'very important - not important at all' dimension scored from -3 to +3.

Heroin usage intentions were assessed with a single 7-point 'likely - unlikely' 1 to 7 scale.

The following are examples of the statements used to assess the components of attitudes to using heroin and subjective norms.

**1) Behavioural beliefs:**

'My heroin use will cause severe damage to my liver'

There were 25 such statements each followed by a 7-point scale with endpoints labelled 'likely -

unlikely'.

**2) Evaluations:**

'Having severe liver damage as a result of my heroin use is ....'

There was one such evaluation statement corresponding to each of the behavioural belief statements and the 7-point response scales had end points labelled 'good - bad'.

**3) Normative beliefs:**

'My parents think that I .....'

There were 5 such statements, varying in the named social referent. The 7-point response scale had 'should give up using heroin in the near future' and 'should not give up using heroin in the near future' endpoints

**4) Motivation to comply:**

'How important is it for you to do what your parents think you should do?' The question was followed by each of the 5 social referents and an accompanying 7-point scale with end points labelled 'important' and 'unimportant'.

The last three items were designed to assess intentions about using heroin in the next 3 months followed by a single 7-point scale labelled 'likely - unlikely'. The mid-point of the scale was labelled 'I don't know'. An example of the questionnaire used in the present experiment is presented in Appendix 6.

## 11.13. EXPERIMENT 111: study (c)

It is the intention of Experiment 111: study (c) to test the efficacy of a fear appeal and a social appeal in influencing current heroin users' attitudes and/or intentions with regard to using heroin in the next three months.

## 11.14. Method

Experimental Design. As the study was testing the relative effectiveness of two different types of persuasive appeals in influencing attitudes and/or intentions towards using heroin the experiment used a between subjects design.

Subjects. 22 heroin users took part in this experiment, 11 subjects in each condition. No subject had taken part in any research to date conducted by this thesis. Subjects were recruited from Denmark Street Drug clinic, ECODA Drug Centre, Alban House and by personal contact. All subjects were trying to stop their heroin use or to control it to the point of 'occasionally' using it. 65% of the subjects were interviewed at the centre of contact and 35% were interviewed in their own homes. Table 22 presents a detailed description of the subjects classified by condition, sex, age, employemnt status and mean length of time (in years) of using heroin.

Table 22: Description of Subjects who Participated in Experiment 111: study (c)

**Fear Appeal Condition:**

Mean Age: 22.5 years

Sex: 72.7% male, 27.3% female

Employment Status: 72.5% unemployed, 27.5% employed

Mean Length of Time Using Heroin: 5 years

(N=11)

**Social Appeal Condition:**

Mean Age: 23.3 years

Sex: 63.7% male, 36.3% female

Employment Status: 54.6% unemployed, 45.4% employed

Mean Length of Time Using Heroin: 6.2 years

(N=11)

Procedure. Subjects were informed that the study was designed to obtain a measure of heroin users' attitudes towards taking heroin. It was stressed that the study was in two parts and that a follow-up interview would be required of them later in the day. They were informed that the questionnaire was fairly detailed and would take approximately 20 minutes to complete.

Pre-test. To obtain a measure of subjects' attitudes before exposure to the persuasive appeal, each subject completed the constructed attitude questionnaire (Appendix 6) on an individual basis.

Although the questionnaire was designed to be self-administered, the author remained with each respondent in order to answer any questions about how to proceed. On the first page of the questionnaire subjects were asked to provide their names (or some form of identification) and demographic information. Subsequent pages contained the questions designed to measure attitudes towards using heroin, subjective norms relating to heroin use and intentions about using heroin in the next 3 months. After completion, subjects were thanked and told that they would be re-interviewed later on in the day.

Exposure to the persuasion appeals and post-test. Approximately 3 hours after obtaining a pre-test measure of attitudes, subjects were given one of the two appeals which exposed them to a communication which fostered the conclusion that heroin use results in (a) serious health consequences or (b) serious social consequences and which recommended that to avoid these consequences heroin users should give up using heroin. Distribution of the two types of appeal was totally random. Subjects were asked to read carefully through the appeal. In order to assess any change in subjects' attitudes, subjective norms and/or intentions, the attitude questionnaire was presented for a second time. Again the author remained with the respondents throughout the whole procedure.

Data scoring. All items, apart from the advantage items, were scored so that a high score indicated good prognosis. Advantage items were scored so that a low score indicated good prognosis.

Attitude scores were obtained (following the standard Fishbein-Ajzen procedure) by mulitplying each belief score by its evaluation and the two products summed. To obtain a subjective norm score each subjective norm belief was multiplied by the motivation to comply with the referent and the two products summed. Intentions were assessed with a single 7-point score. High intention scores indicate positive intentions.

All subjects were debriefed on completion of the second questionnaire.

## 11.15. Results

To determine which, if any, of the two appeals was the most effective in influencing subjects' attitudes after exposure a series of 2 (before x after) x 2 (fear x social) analyses of variances (repeated measure on one factor) was carried out on subjects' scores, (intention measures were not included in these analyses.) Fear/social appeal was the between subjects variable and before/after presentation of the message was the within subjects variable.

At this point it is perhaps worth illustrating, in graphic form, the data organization of the attitude

questionnaire. This will aid with the interpretation of the various analyses carried out on the questionnaire. A graphic illustration is presented on page 273. The explication of the graphic illustration in presented below.

Box 1 contains all of the items which constitute the questionnaire. The analysis which was carried out on these items examined all attitude items, (conceptualizing attitude as the summed products of beliefs and evaluations) i.e. health attitudes, social attitudes, advantage attitudes, and the subjective norms, collectively. Intention measures were not included in this analysis.

Box 2 contains the sub-sets of attitude items. The analyses carried out on these items examined each sub-set of attitude (again, conceptualizing attitude as the summed products of beliefs and the evaluation of these beliefs) i.e. health attitude items, social attitude items, advantage attitude items, and subjective norms, independently.

Box 3 contains all of the beliefs component of attitude. The analysis carried out on these items examined all of the beliefs component of attitude, i.e. health beliefs component, social beliefs component, advantage beliefs component, and subjective norm beliefs component, collectively.

Box 4 contains all the evaluations component of attitude. The analysis carried out on these items examined all the evaluations component of attitude, i.e. health evaluations component, social evaluations component, advantage evaluations component, and subjective norm evaluations component, **collectively**.

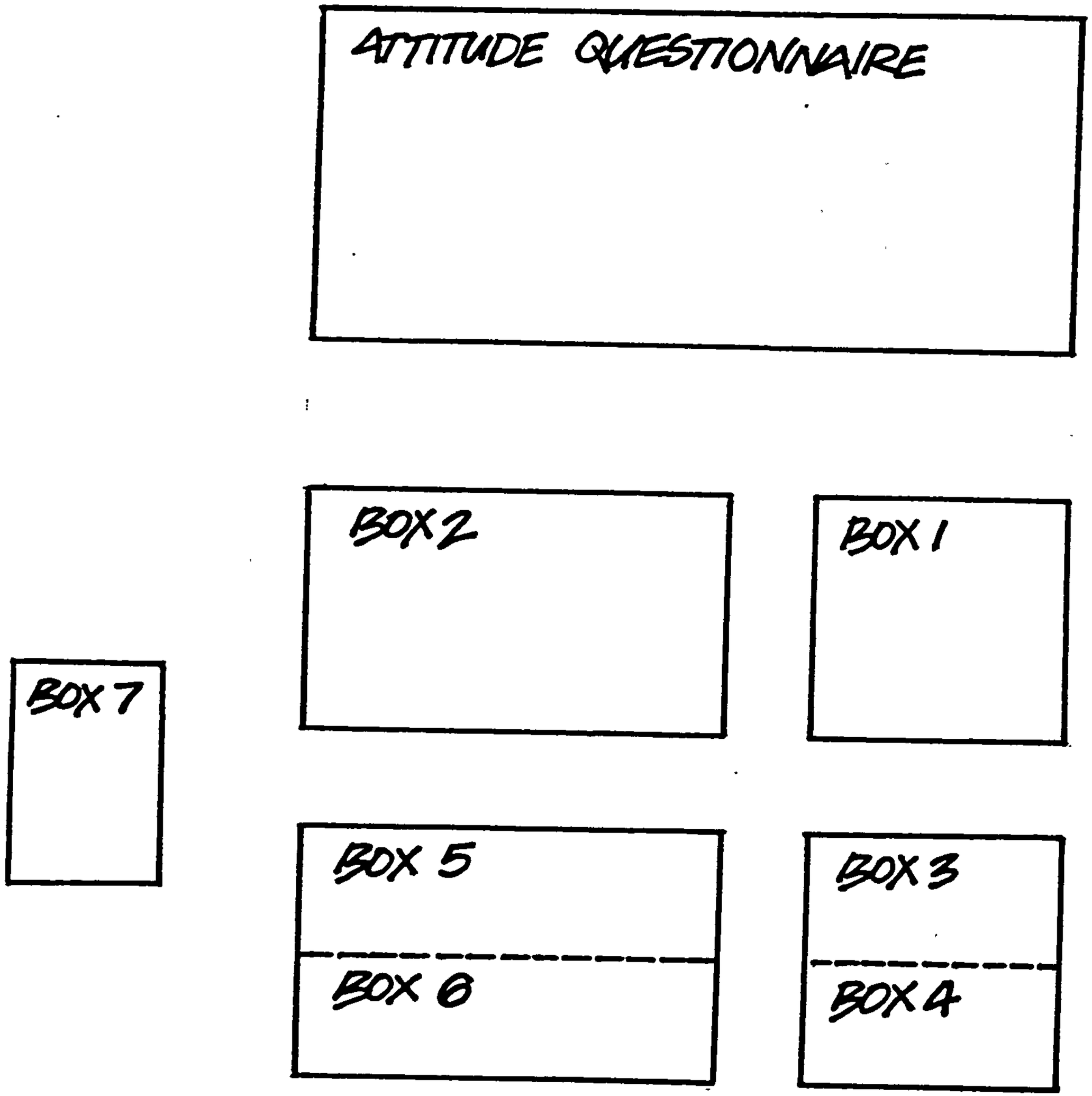
Box 5 contains all the beliefs component of the four sub-sets of attitude. The analysis carried out on these items consisted of a three way analysis which examined the four sub-sets' belief only component of attitude, **independently**.

Box 6 contains all the evaluations component of the four sub-sets of attitude. The analysis carried out on these items was a three way analysis of variance which examined the four sub-sets' evaluation only components of attitude **independently**.

The items in Boxes 5 and 6 were further examined by a series of two way analysis of variance.

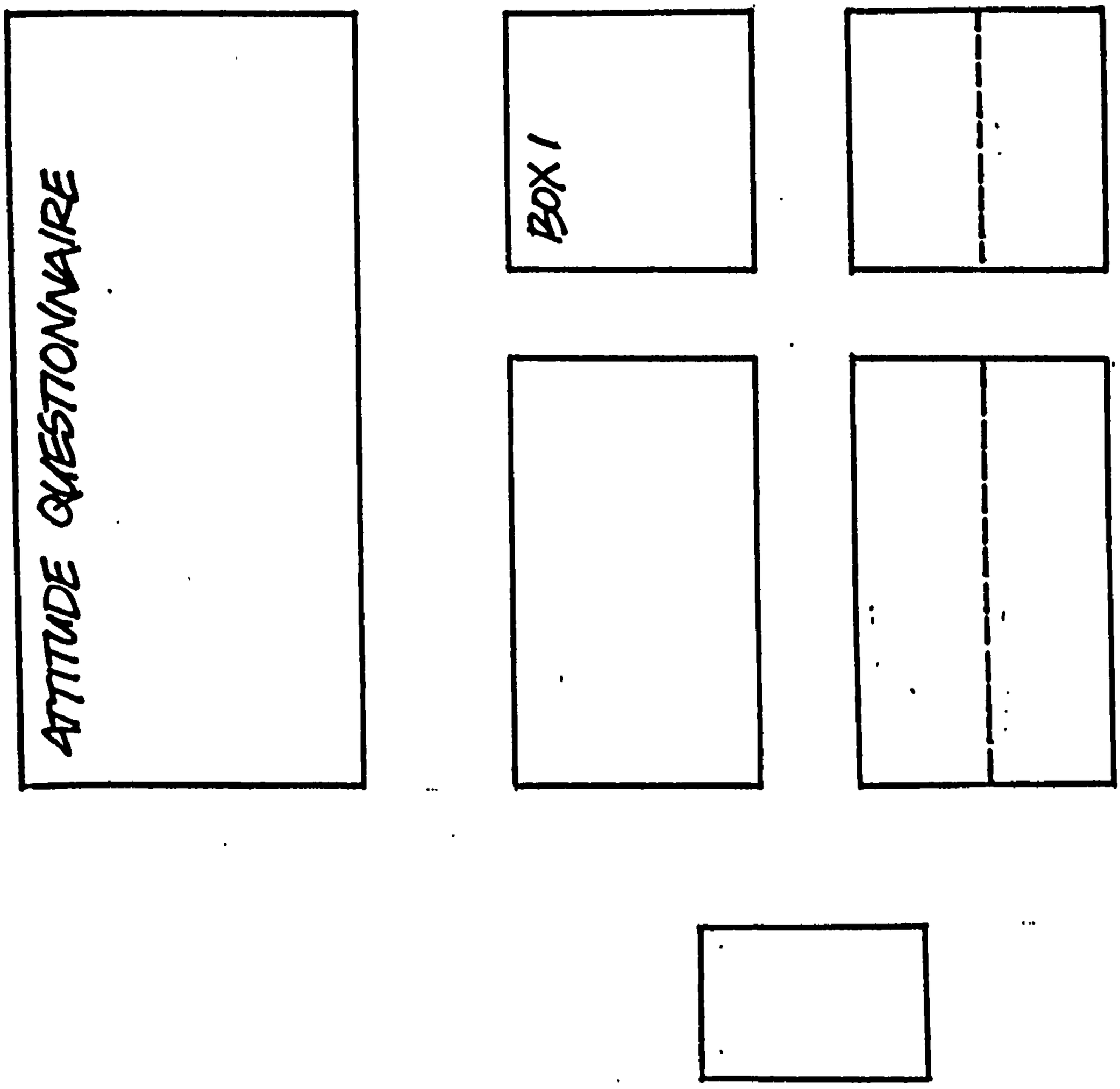
Box 7 contains the three intention measures.

GRAPHIC ILLUSTRATION OF ATTITUDE QUESTIONNAIRE



Analysis 1. The first analysis was carried out on subjects' **total** attitude scores. The items included in this analysis are the items which constitute box 1 of the graphic illustration of the questionnaire presented on page 273. A fuller illustration of the items included in this analysis is presented on the following page.

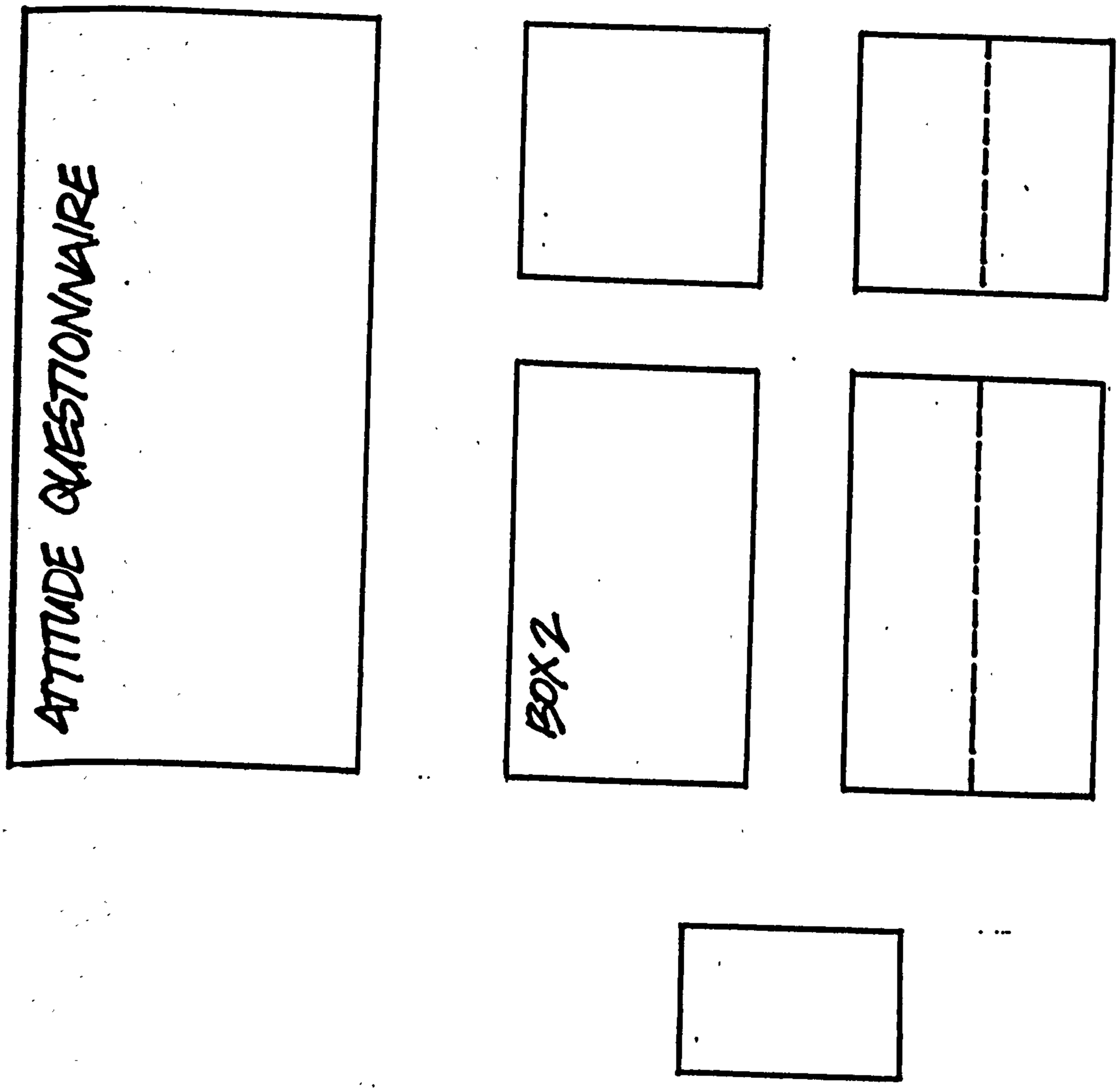
# GRAPHIC ILLUSTRATION OF ATTITUDE QUESTIONNAIRE



This analysis yielded no significant results. From this result it appears that neither the fear appeal nor the social appeal had any effect in influencing current heroin users' attitudes towards using heroin or on their subjective norms. The results from this analysis are presented in Appendix 7.

Analysis 2. The second analysis consisted of a series of analyses which looked at each sub-set of attitude items, (i.e. health attitudes, social attitudes, advantage attitudes and subjective norms) independently. The items included in these analyses are the items which constitute box 2 of the graphic illustration of the questionnaire presented on page 273. A fuller illustration of the items included in these analyses is presented on the following page.

# GRAPHIC ILLUSTRATION OF ATTITUDE QUESTIONNAIRE



A significant result for health attitudes emerged from this series of analyses. This result is shown in Table 23. There was no significant change for the social and the advantage attitude items or the subjective norm measures. The results from these analyses are presented in Appendices 8, 9, and 10 respectively.

Table 23: Two Way Analysis of Variance (repeated measures) for Health Attitudes. Sum of products.

| Source | ss | df | ms | f | p |
|---|---|---|---|---|---|
| between subs | | | | | |
| appeal | 7884.5 | 1 | 7884.5 | 2.22 | ns |
| Sub within group | 71018.9 | 20 | 3550.94 | | |
| within subs | | | | | |
| time | 6651.83 | 1 | 6651.83 | 6.50 | <0.05 |
| messagextime | 1191.84 | 1 | 1191.84 | 1.16 | ns |
| (N=22) | | | | | |

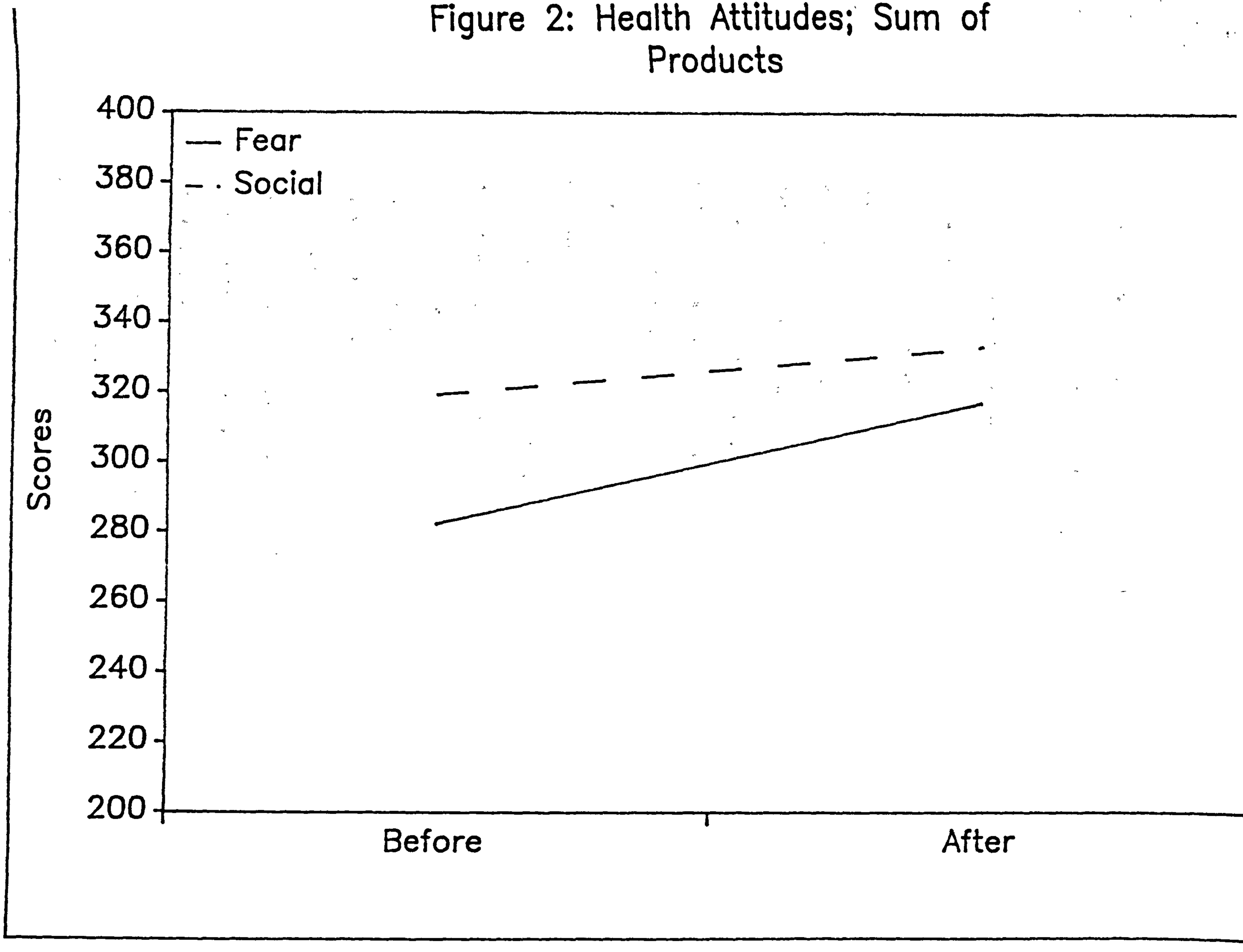
From Table 23 it can be seen that there is no significant difference for the main effect of type of appeal indicating that subjects did not respond differentially to the different types of appeals. Also, there was no significant difference found for the interaction between appeal type and time. However, a significant effect was found for time showing that subjects' health attitudes changed after

exposure. Figure 2 on the following page illustrates that this change occurred in both conditions. From an inspection of the means for the two conditions:

| | Fear | Social |
|---|---|---|
| Mean Before | 282.0 | 319.2 |
| Mean After | 317.0 | 334.4 |

it can be seen that both subjects' scores in the social appeal condition and the fear appeal condition changed after exposure to their respective appeals with the fear appeal producing the greater change. However, since the interaction was non-significant, it is demonstrated that the individual differences between the two groups was too great to yield a significant result. This effect is illustrated on the following page by Figure 2.

Figure 2: Health Attitudes; Sum of Products



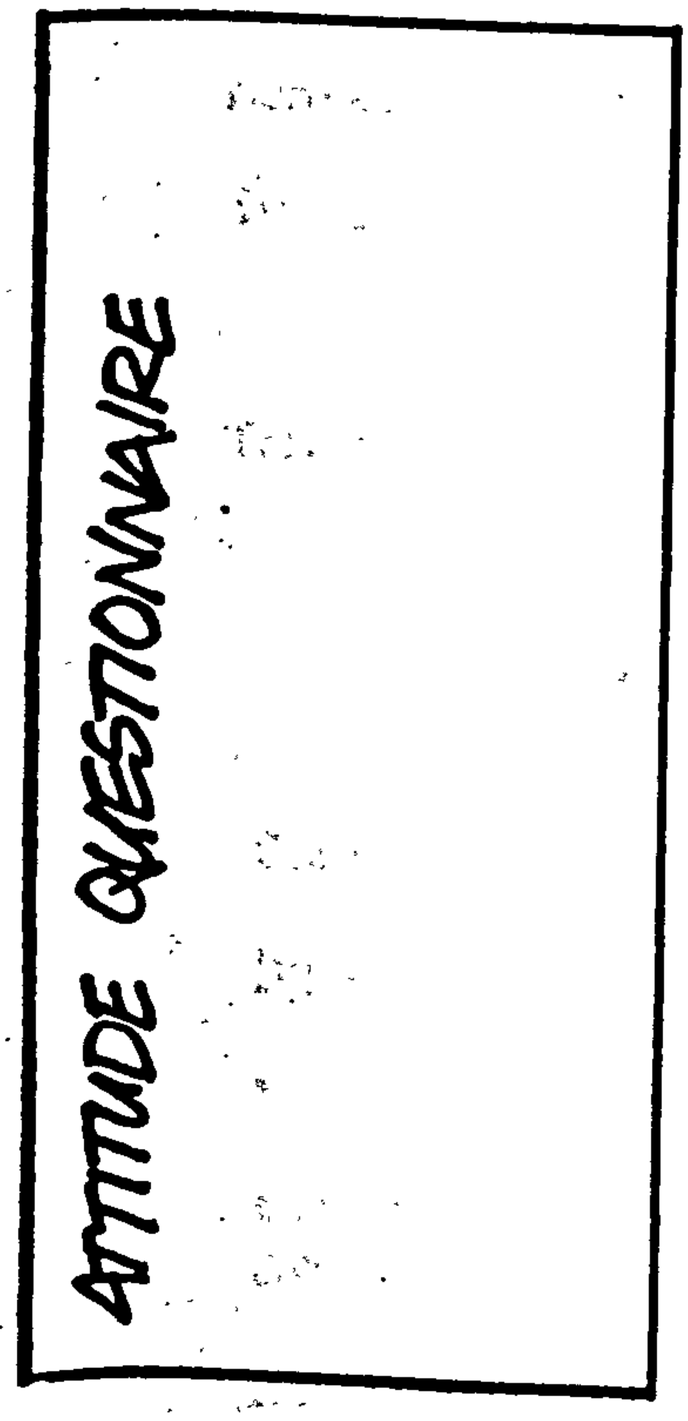
## 11.16. An Examination of the Two Independent Components which Constitute Attitude

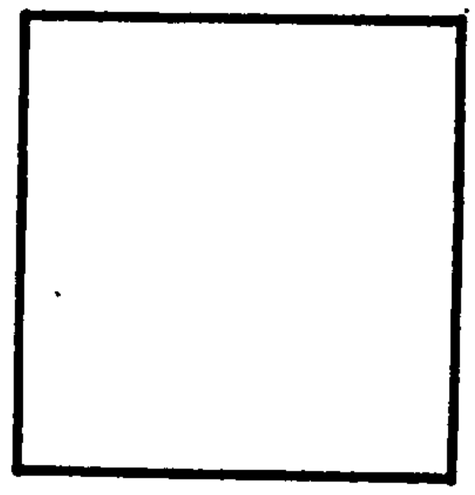
Although Fishbein and Ajzen (1975) state that a person's attitude towards an object is determined by (i) the summed products of a person's beliefs that the object possesses certain attributes and (ii) his/her evaluations of those attributes, they state that these two components can be viewed as two different determinants of attitude. For example, two people can believe that performing a behaviour will lead to the same set of consequences, yet may hold different attitudes. This would happen if they evaluate the outcome differently or if the strength of their belief is different. Two people may believe that taking heroin will 'make me feel more relaxed'. One person may evaluate 'feeling relaxed' positively while the other may evaluate this same outcome negatively. In such situations, this belief will contribute positively to the first person's attitude but negatively to the second person's attitude towards 'my taking heroin'. Similarily, even though two people may evaluate 'feeling relaxed' equally positively, one may believe that it is extremely likely that heroin will make him/her feel relaxed while another person may believe that it is only slightly likely that taking heroin will lead to this outcome. If this were the case, this belief would contribute more positively

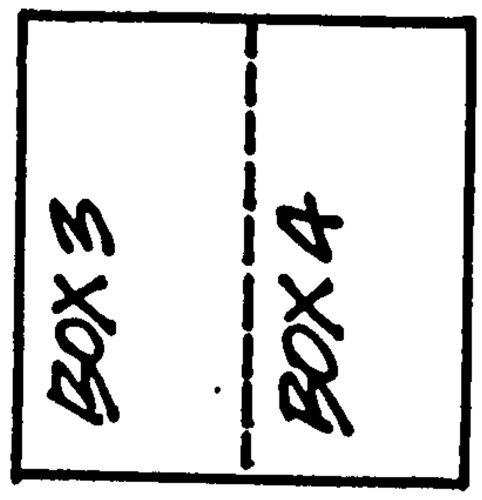
to the former person's attitude than to the latter person's attitude. It is clear from this that a persuasive attempt may influence the belief variable more than the evaluative variable or vice versa. In order to determine which of these two variables were most influenced by the two persuasive appeals used in this study, these two components were analysed independently. The analyses conducted on these two independent variables were identical to the analyses carried out for their summed products, (i.e. a series of 2 X 2 analysis of variance with repeated measures on one factor).

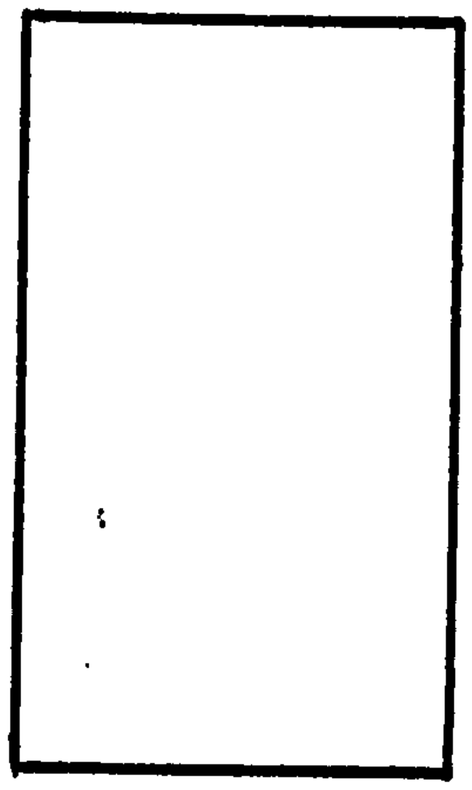
Analysis 3. The items included in these analyses are the items which are contained in boxes 3 and 4 respectively of the graphic illustration of the questionnaire presented on page 273. A fuller illustration of the items included in this analysis is presented on the following page.

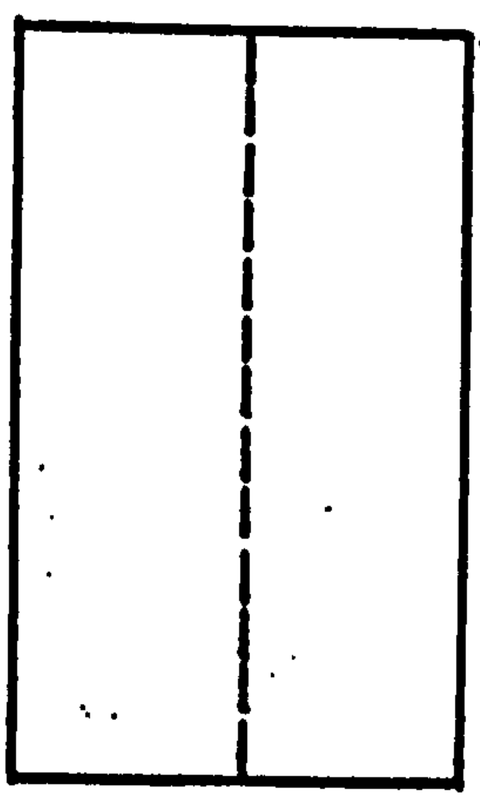
# GRAPHIC ILLUSTRATION OF ATTITUDE QUESTIONNAIRE

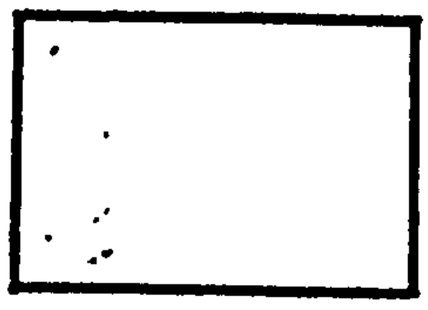








Total belief component scores yielded a significant result. This result is presented in Table 24 below. Total evaluation component scores yielded non-significant results. The result of this analysis is presented in Appendix 11.

Table 24: Two Way Analysis of Variance (repeated measures) for **Total** Belief Component Items.

| Source | ss | df | ms | f | p |
|---|---|---|---|---|---|
| between sub | | | | | |
| appeal | 3044.45 | 1 | 3044.45 | 7.4 | <0.05 |
| sub within group | 8202.27 | 20 | 410.11 | | |
| within subs | | | | | |
| time | 200.81 | 1 | 200.81 | 1.77 | ns |
| appealxtime | 81.81 | 1 | 81.81 | 0.77 | ns |
| (N=22) | | | | | |

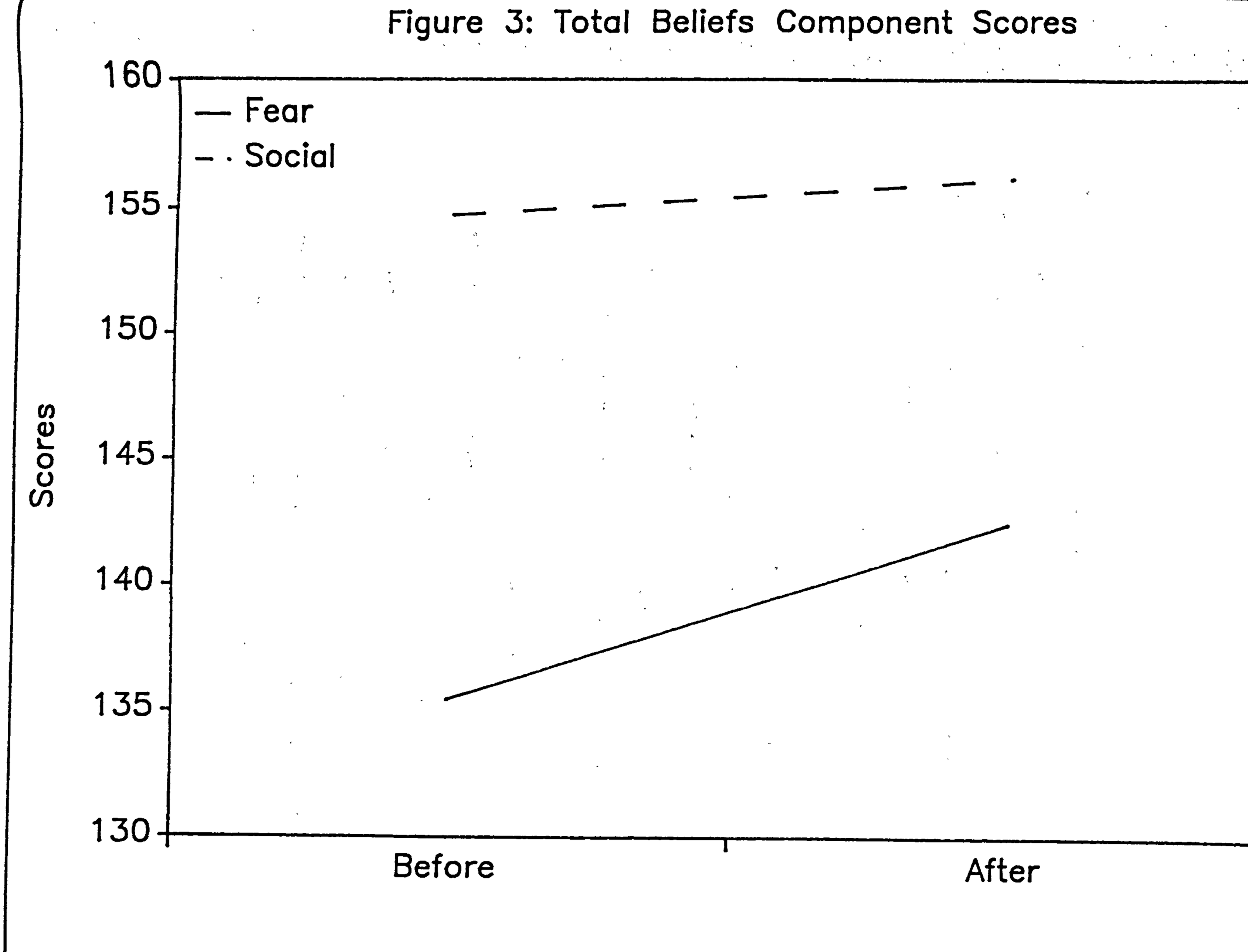
From Table 24 it can be seen that the analysis revealed no significant difference for the main effect of time. It appears that a significant effect was found for message type. From an inspection of the means from this analysis:

| | Fear | Social |
|---|---|---|
| Mean Before | 135.4 | 154.8 |
| Mean After | 142.4 | 156.3 |

it appears that the fear appeal produced the most

change. However, like analysis 2, the interaction yielded a non-significant result again demonstrating there to be an overall difference between the two groups of subjects' scores both before and after exposure to the appeals. This effect is illustrated in Figure 3 which is presented on the following page.

Figure 3: Total Beliefs Component Scores



One striking feature to emerge from the above series of analysis is the finding that the two sets of subjects differed, to quite a large degree, in their base line attitude scores. It seems that subjects who participated in the fear appeal condition had lower base line attitude scores, which were present both before and after exposure to the appeal, than subjects who took part in the social appeal condition.

Analysis 4. In order to determine whether it was the case that the fear appeal condition scores were lower than the social appeal condition scores because of a subject effect, a 2 x 4 x 2 way analysis of variance (repeated measures on 2 factors) was carried out on the four sub-sets of the belief component scores and the evaluation component scores independently. The items included in these analyses are the items which constitute boxes 5 and 6 respectively of the graphic illustration of the questionnaire presented on page 273. The following page contains a fuller illustration of the items used in this analysis. The results of these analyses are shown in Tables 25 and 26.

# GRAPHIC ILLUSTRATION OF ATTITUDE QUESTIONNAIRE

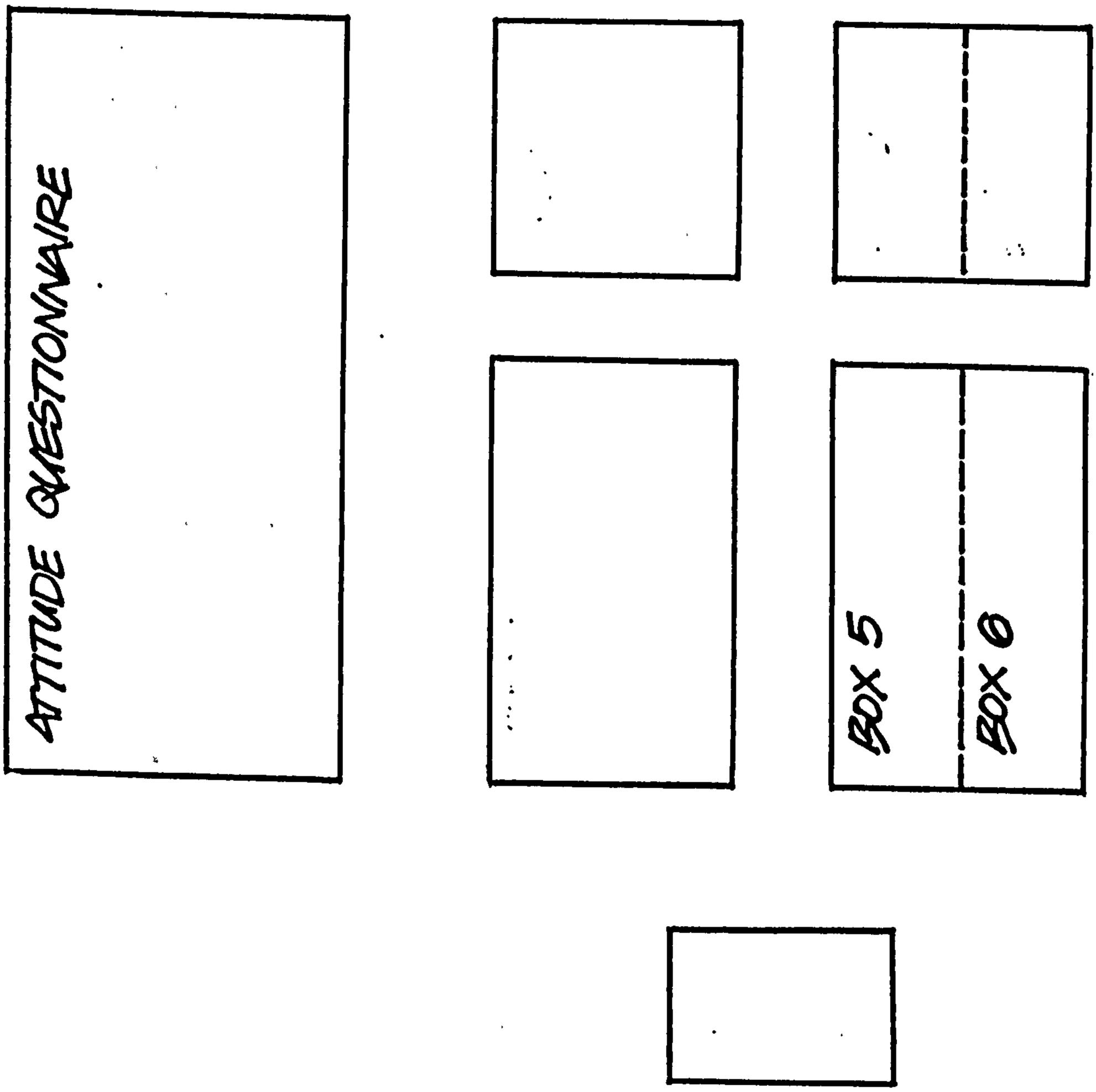


Table 25: Three Way Analysis of Variance (repeated measures) for Belief Component Scores for the four sub-sets of attitude items.

| source | ss | df | ms | f | p |
|---|---|---|---|---|---|
| between sub | | | | | |
| appeal | 824.77 | 1 | 824.77 | 8.17 | <0.01 |
| sub within groups | 2016.63 | 20 | 100.83 | | |
| within sub | | | | | |
| sub-sets | 48270.4 | 3 | 16090.1 | 254.05 | <0.001 |
| sub-set x appeal | 470.65 | 3 | 156.8 | 2.47 | ns |
| sub-set x s within groups | 3800.0 | 60 | 63.33 | | |
| time | 37.27 | 1 | 37.27 | 1.41 | ns |
| appeal x time | 17.18 | 1 | 17.18 | .65 | ns |
| time x s within groups | 525.40 | 20 | 26.27 | | |
| sub-set x time | 328.51 | 3 | 109.50 | 5.82 | <0.01 |
| appeal x sub-set x time | 85.69 | 3 | 28.56 | 1.52 | ns |
| sub-set x time x s within gp | 1127.40 | 60 | 18.79 | | |

(N=22)

The findings from the above Table reveal that overall, there is a significant difference between the scores of the two groups on the belief component of attitude ($F=8.17$, $p<0.01$). Subjects in the social appeal condition had significantly higher belief component scores, both in the pre and post message

measures of attitude, than subjects in the health appeal condition confirming that there was a difference between the two groups both before and after exposure to their respective appeals. There was also a significant main effect for the four sub-sets of belief components, ($F=254.05$, $p<0.001$), confirming that subjects responded differentially on each sub-set of items irrespective of condition. There was no significant difference found for the main effect of time. Subjects scores did not significantly change after exposure to either of the appeals. However, a significant time x sub-sets of belief components was found, ($F=5.82$, $p<0.01$) demonstrating that certain sub-sets of belief components produced differences in subjects' scores after exposure for both conditions. Figure 4, presented on the following page, illustrated that subjects health belief component and advantage belief component scores significantly changed after exposure to both messages.

These figures should be read in conjunction with the tables presented on pages 295 and 300.

Figure 4: Beliefs Component Scores For Four Sub-Sets

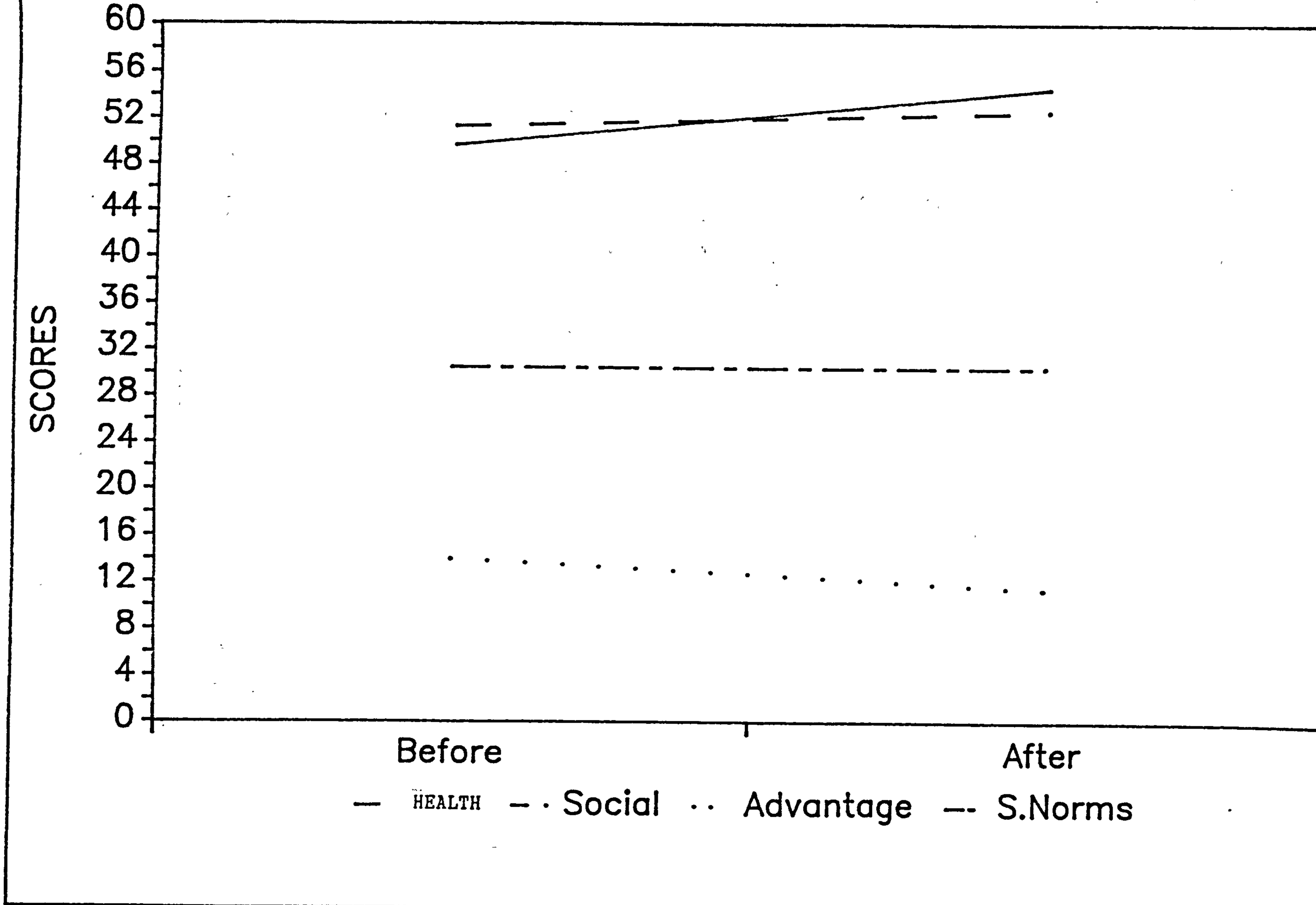


Table 26: Three Way Analysis of Variance (repeated measures) for the **Evaluation** Component of the Four Sub-Sets of Attitudes.

| source | ss | df | ms | f | p |
|---|---|---|---|---|---|
| <u>between sub</u> | | | | | |
| appeal | 61.45 | 1 | 61.45 | .40 | ns |
| sub within groups | 3039.3 | 20 | 151.96 | | |
| <u>within sub</u> | | | | | |
| sub-sets | 43579.8 | 3 | 14526.61 | 207.88 | <0.001 |
| sub-set x appeal | 80.49 | 3 | 26.83 | .38 | ns |
| sub-set x s within groups | 4192.65 | 60 | 69.87 | | |
| time | 2.27 | 1 | 2.27 | .09 | ns |
| appeal x time | 10.02 | 1 | 10.02 | .41 | ns |
| time x s within groups | 479.70 | 20 | 23.98 | | |
| sub-set x time | 108.40 | 3 | 36.13 | 1.20 | ns |
| appeal x sub-set x time | 86.02 | 3 | 28.67 | .95 | ns |
| sub-set x time x s within gps | 1795.56 | 60 | 29.92 | | |

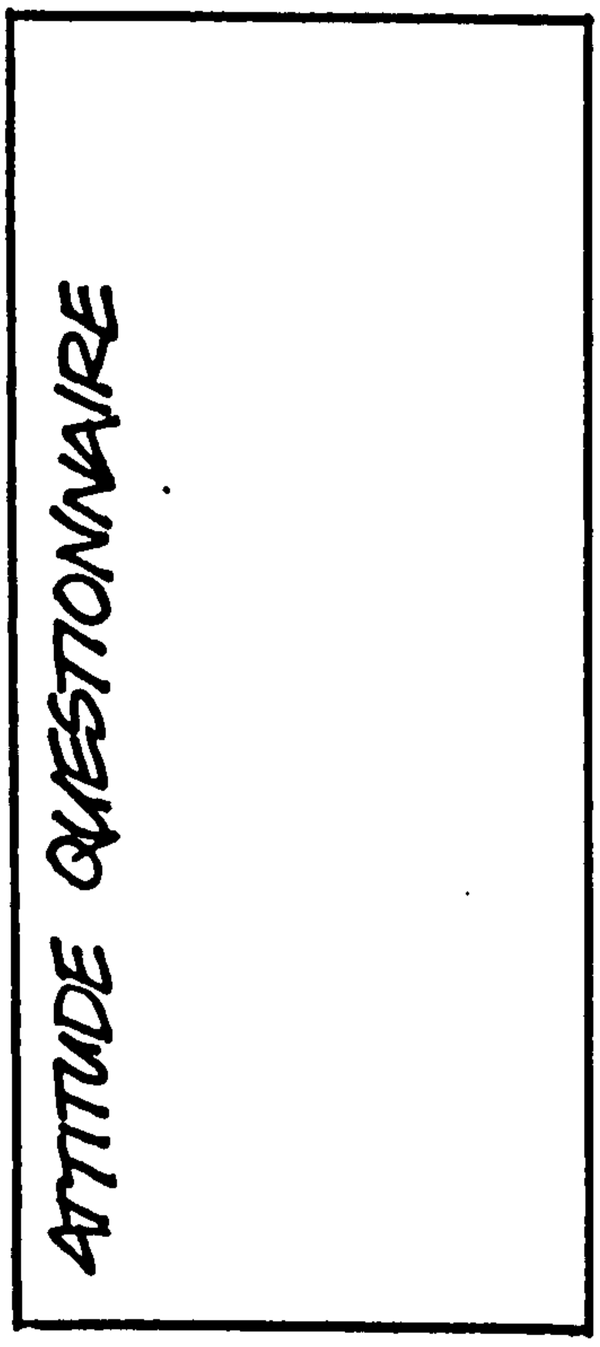
(N=22)

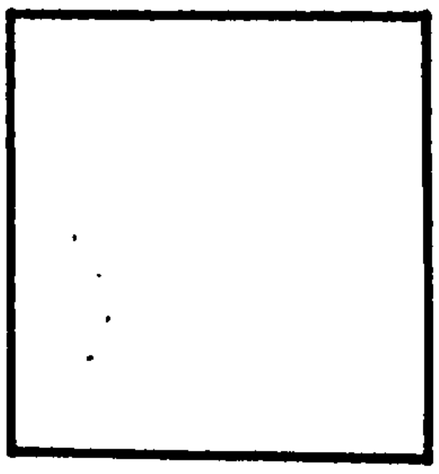
As can be seen from Table 26 above, unlike the belief component of attitude, there was no significant difference between the scores of the two groups on the evaluation component of attitude. There was a significant difference for the four sub-sets of the evaluation components confirming that subjects

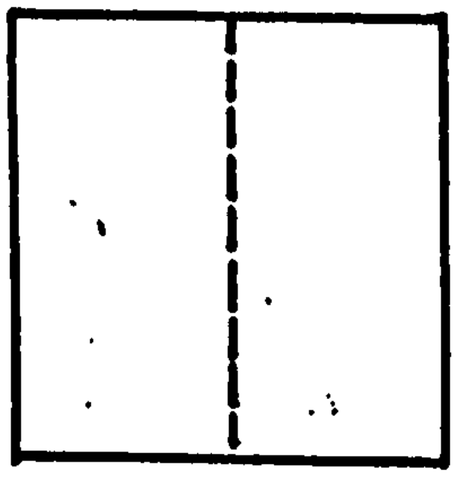
evaluated each sub-set of items differentially irrespective of type of appeal. From this finding it is clear that subject differences existed between the two groups of subjects before the experiment began. This difficulty will be discussed at a later stage in this chapter. No significant difference was found for the main effect of time and there was no significant difference found for the interactions.

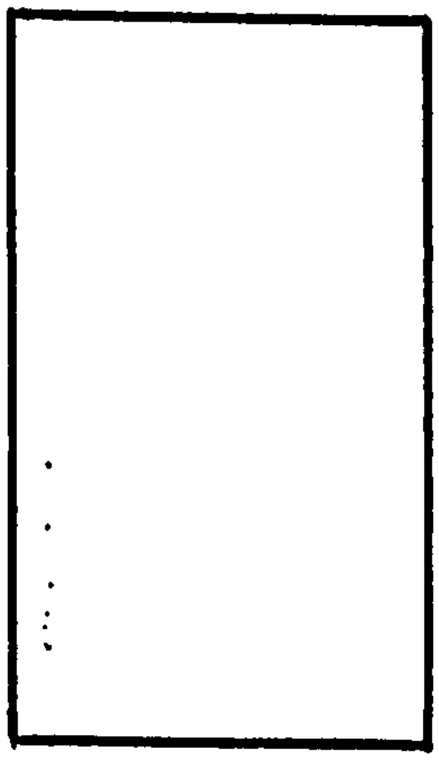
In order to clarify the above findings analysis 5 consisted of a series of analyses which looked at each sub-set of subjects' belief component scores, (i.e. health beliefs component; social beliefs component; advantage beliefs component; and subjective norm beliefs component) independently. The items included in these analyses are the items which constitute boxes 5 and 6 respectively of the graphic illustration of the questionnaire presented on page 273. An fuller illustration of the items used in these analyses is presented on the following page.

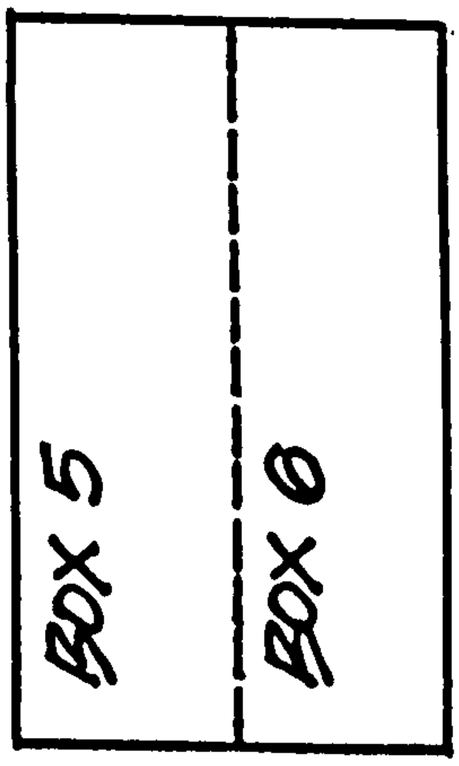
# GRAPHIC ILLUSTRATION OF ATTITUDE QUESTIONNAIRE










Health beliefs component, social beliefs component, and advantage beliefs component scores all yielded significant results. These results are shown in Tables 27 to 29 respectively. Non-significant results emerged for subjective norm beliefs component. Similarily, all the evaluation component scores yielded non-significant results. These results are presented in Appendices 12 and 13 respectively.

Table 27: Two Way Analysis of Variance (repeated measures) **Health Belief Component** Only.

| source | ss | df | ms | f | p |
|---|---|---|---|---|---|
| <u>between sub</u> | | | | | |
| appeal | 664.56 | 1 | 664.56 | 6.52 | <0.05 |
| sub within groups | 2038.09 | 20 | 101.90 | | |
| <u>within sub</u> | | | | | |
| time | 270.02 | 1 | 270.02 | 5.73 | <0.05 |
| appealxtime | 54.56 | 1 | 54.56 | 1.15 | ns |
| (N=22) | | | | | |

From an examination of the results above it can be seen that there is a significant main effect for time suggesting that subjects' scores in both conditions changed after exposure to the appeals. From an inspection of the mean scores:

| | Fear | Social |
|---|---|---|
| Mean Before | 44.7 | 54.7 |
| Mean After | 51.9 | 57.45 |

it appears that subjects' scores in the fear appeal condition increased more than subjects' scores in the social appeal condition. However, since the interaction was non-significant, it is clear that subject bias was present in the two conditions which was maintained throughout the procedure. This effect is illustrated by Figure 5 presented on the following page.

Figure 5: Health Beliefs Component Scores

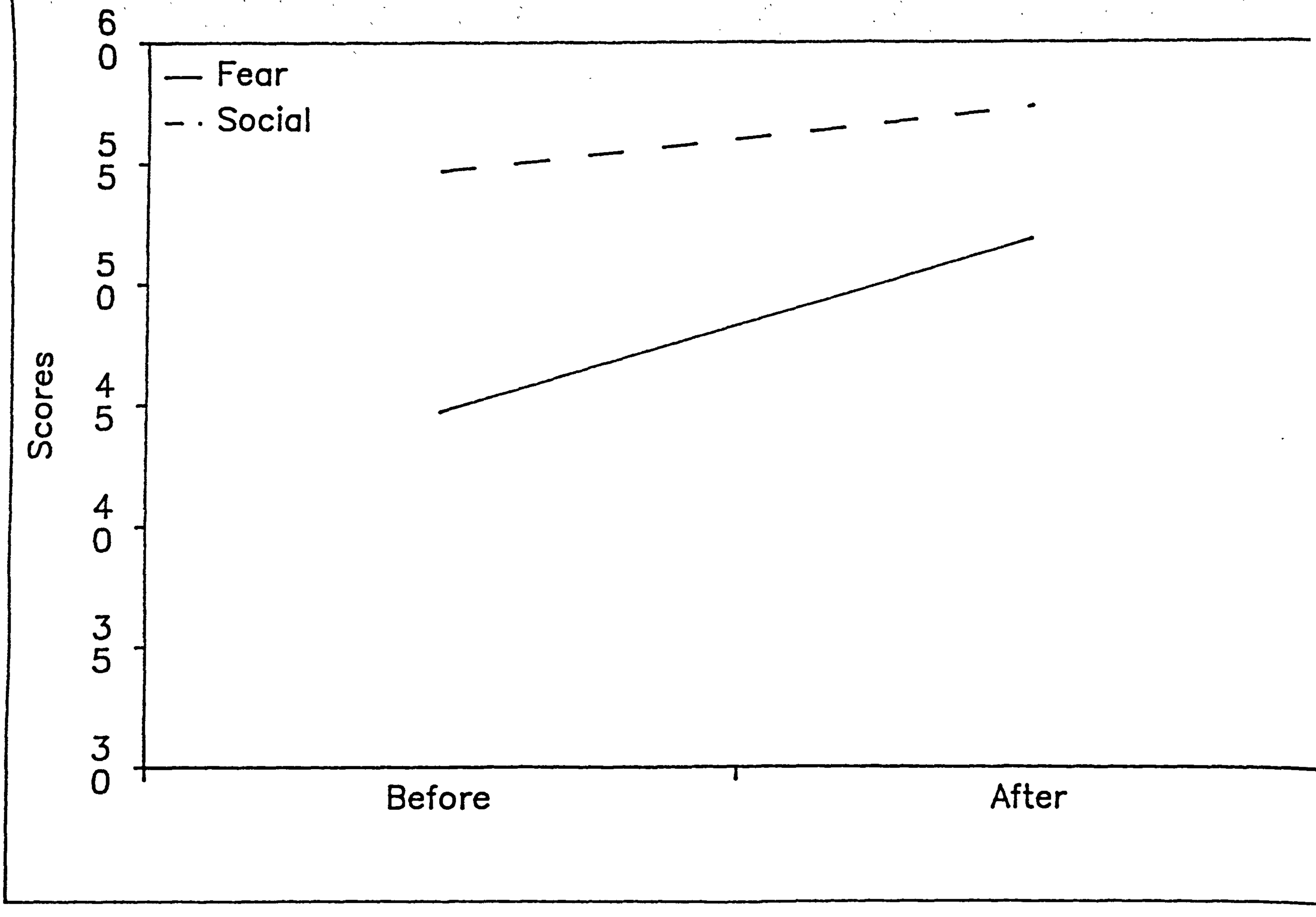


Table 28: Two Way Analysis of Variance (repeated measures) for **Social Belief Components** Only.

| source | ss | df | ms | f | p |
|---|---|---|---|---|---|
| <u>between sub</u> | | | | | |
| appeal | 603.84 | 1 | 603.84 | 7.54 | <0.05 |
| sub within groups | 1601.63 | 20 | 80.08 | | |
| <u>within sub</u> | | | | | |
| time | 21.84 | 1 | 21.84 | 1.20 | ns |
| appealxtime | 34.56 | 1 | 34.56 | 1.90 | ns |

(N=22)

From Table 28 it can be seen that the analysis carried out on the social belief component scores revealed a similar result to that of total belief component scores (Table 24). The main effect of appeal type demonstrates that individual differences between the two groups were responsible for this result From an inspection of the means of this analysis:

| | Fear | Social |
|---|---|---|
| Mean Before | 46.7 | 59.9 |
| Mean Social | 49.9 | 55.5 |

it can be seen that, again, subjects differed to a considerable degree, in their base line scores before exposure which was maintained in their post exposure scores. This effect is illustrated on the following page by Figure 6.

Figure 6: Social Beliefs Component Scores

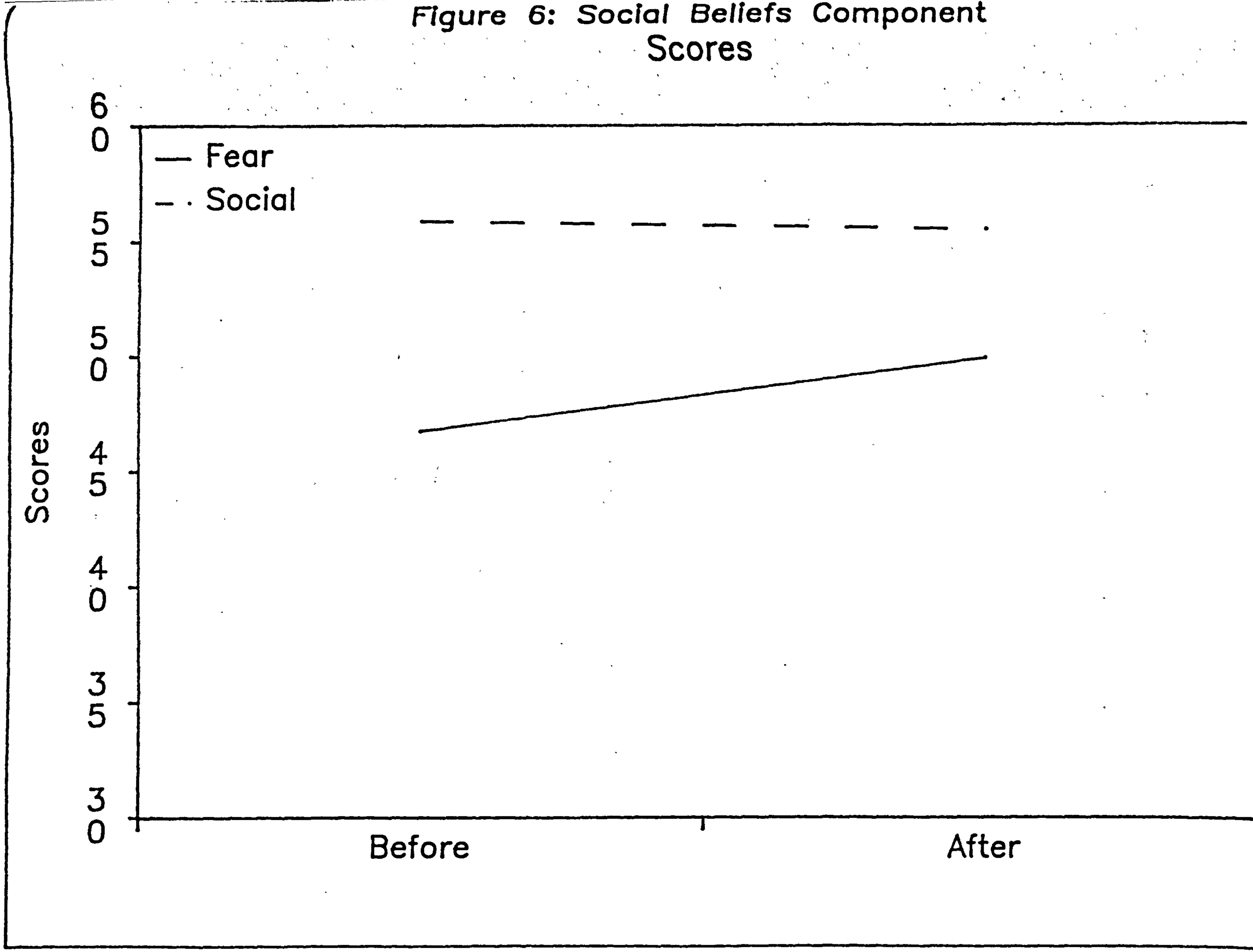


Table 29: Two Way Analysis of Variance (repeated measures) for **Advantage Belief Component** Only.

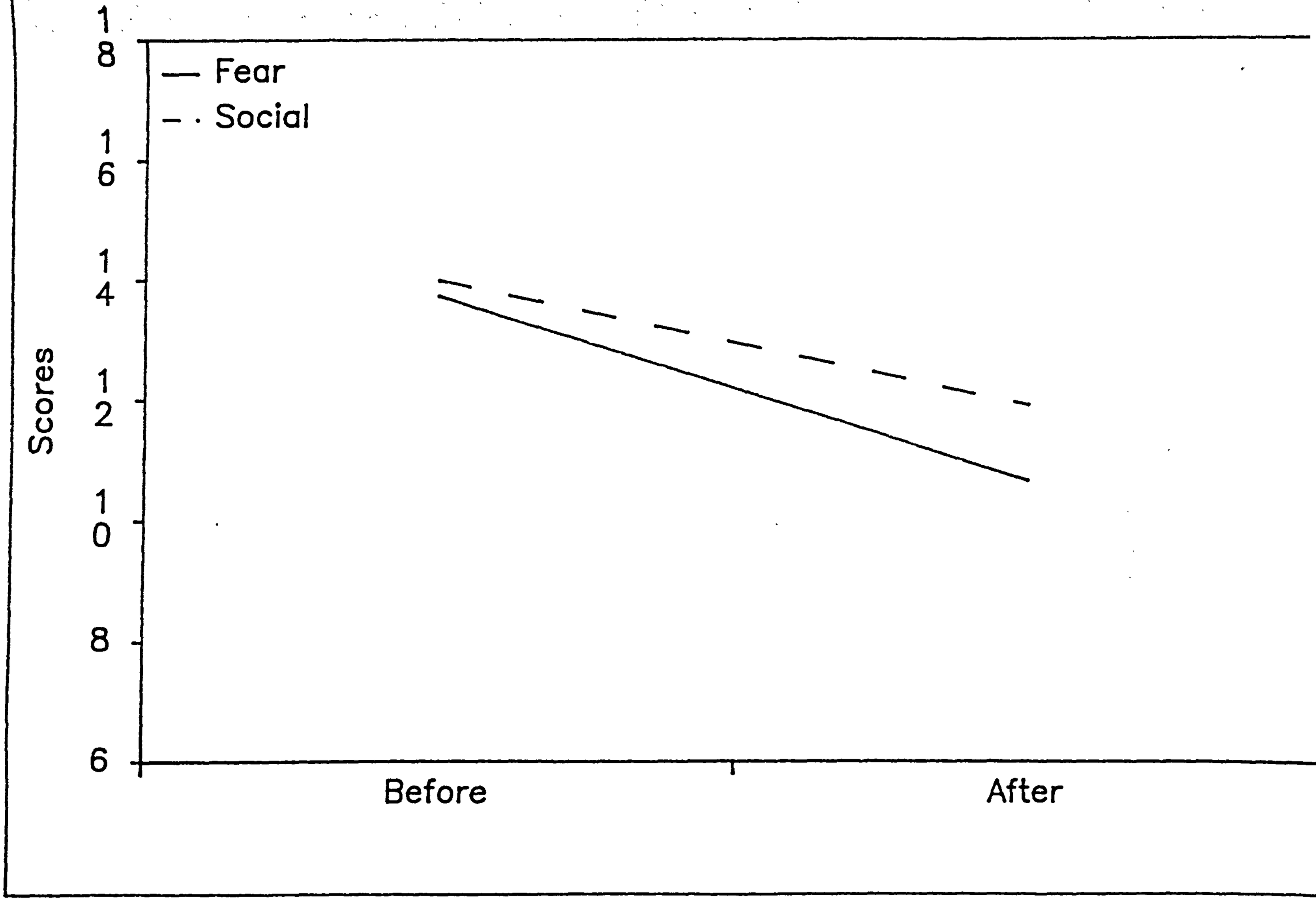
| source | ss | df | ms | f | p |
|---|---|---|---|---|---|
| between sub | | | | | |
| appeal | 6.56 | 1 | 6.56 | 0.07 | ns |
| sub within groups | 1756.72 | 20 | 87.83 | | |
| within sub | | | | | |
| time | 73.84 | 1 | 73.84 | 5.79 | <0.05 |
| appealxtime | 2.75 | 1 | 2.75 | 0.21 | ns |
| (N=22) | | | | | |

The final result to emerge from this series of analyses, Table 29, revealed that there was no main effect for message type nor was there a significant interaction effect for time x appeal. However, a significant main effect emerged for time. From an inspection of the mean scores from this analyses:

| | Fear | Social |
|---|---|---|
| Mean Before | 13.7 | 14 |
| Mean After | 10.6 | 11.9 |

it can be seen that subjects in both the fear appeal condition and the social appeal condition rated the advantages of using heroin less after exposure. Figure 7, presented on the following page, illustrates this result.

Figure 7: Advantage Beliefs Component Scores



Analysis 6 Turning now to subjects' behavioural intentions with regards to using heroin in the next three months. In order to determine whether there was a change in behavioural intention after exposure to the appeals, a series of 2 (before x after) x 2 (health X social) analyses of variance were carried out on subjects' three intention scores. The items included in these analyses are the items which constitute box 7 of the graphic illustration of the questionnaire presented on page 273. There was no change for intention measure 1 or 3 (decrease heroin use and increase heroin use respectively). These results are presented in Appendix 14. There was a stastistically significant time effect, however, for the intention to stop using heroin. Table 30 shows this result.

Table 30: Two Way Analysis of Variance (repeated measures) for the Intention to Stop Using Heroin.

| source | ss | df | ms | f | p |
|---|---|---|---|---|---|
| <u>between sub</u> | | | | | |
| appeal | 13.09 | 1 | 13.09 | 1.37 | ns |
| sub within groups | 190.81 | 20 | 9.54 | | |
| <u>within sub</u> | | | | | |
| time | 2.27 | 1 | 2.27 | 5.49 | <0.05 |
| appealxtime | 1.45 | 1 | 1.45 | 3.51 | ns |

(N=22)

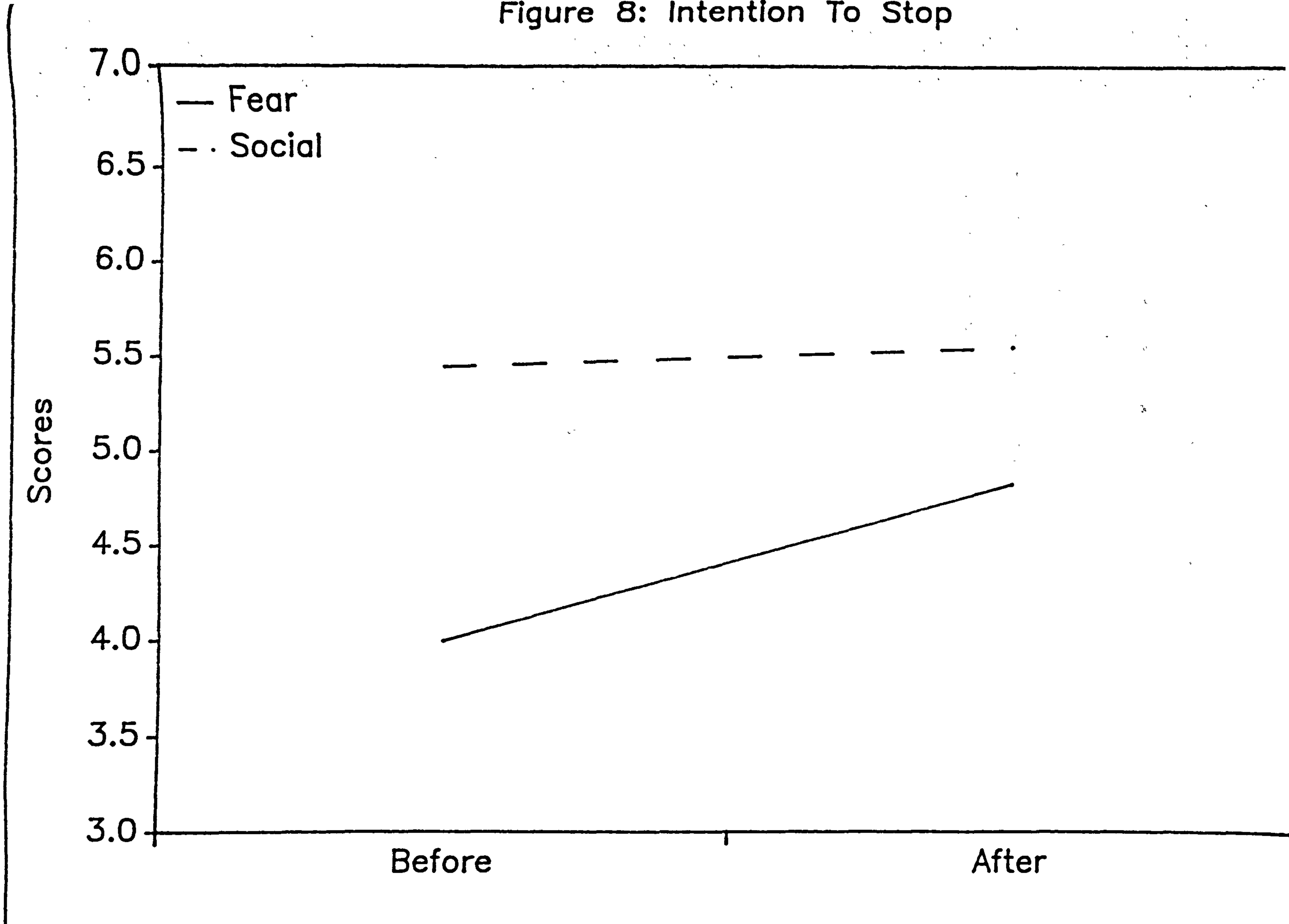
From an inspection of the mean scores from this analysis:

| | Fear | Social |
|---|---|---|
| Mean Before | 4 | 5.45 |
| Mean After | 4.8 | 5.54 |

it can be seen that subjects in both conditions increased their intentions to stop using heroin in the following three months. Since the interaction was non-significant it again appears that no one condition was superior to the other in producing this result. However, as the interaction result cannot be far off significance level, (F=3.51) there may be some justification in saying that the fear appeal was marginally superior to the fear appeal in changing current heroin users' intentions to stop using heroin in the near future. Figure 8, presented on the

following page, illustrates this result.

Figure 8: Intention To Stop



It is acknowledged that the preceding series of analyses examined the attitude questionnaire in all its facets. At this stage it is perhaps worth highlighting in summary form the main findings which emerged from these analyses overall. Table 31 contains a summary of the findings.

Table 31: Summary of the Findings from the Attitude Questionnaire.

| | Attitudes (bxe) | Beliefs (b) | Evaluations (e) |
|---|---|---|---|
| Total Scores | ns | Appeal effect: social scores higher than fear scores | ns |
| Health Sub-set Scores | Time effect (Table 23) | Time effect: increase in both conditions (Table 27) Appeal effect: social scores higher than fear scores | ns |
| Social Sub-Set Scores | ns | Appeal effect: social scores higher than fear scores | ns |
| Advantage Sub-set Scores | ns | Time effect: (Table 29) both groups decreased | ns |
| Subjective Norm Sub-set Scores | ns | ns | ns |

## 11.17. Discussion

This experiment applied Fishbein and Ajzen's theory of reasoned action to the problem of changing heroin using behaviour through persuasive communication. According to the theory, in order to increase the liklihood that heroin users will stop (or decrease) their heroin use, their intention to stop

using (or to decrease) their heroin use must be increased. To accomplish this goal, a persuasive appeal must be directed, either at the attitude toward the behaviour of taking heroin, or, the subjective norm perceived to be connected to heroin taking behaviour. A pilot study revealed that intentions of heroin users, with regard to heroin use, was primarily determined by the attitudinal component. Accordingly, two persuasive appeals were constructed which were designed to attack the attitudinal component of attitude. These messages were directed at the primary beliefs established to be related to using heroin.

The main purpose of the present experiment was to ascertain whether overall attitude change could be more successfully induced by exposure to either a social type appeal, or, a health type appeal. The main findings revealed that, overall attitude (i.e A act = b e ) did not change after exposure to either of the two types of appeal.

However, an examination of the four different sub-sets of attitude items independently revealed that health attitude scores did increase significantly after exposure. This increase, however, occurred in both the fear appeal conditions and the social appeal conditions (see Table 23) suggesting that both messages contributed to this effect. This finding is

inconsistent with the expectations of the model which predicts that a theoretically prepared persuasive message, constructed from appropriate salient beliefs and designed to attack the primary beliefs associated with these salient beliefs, should change (a) the subject's belief that the variable in question (i.e heroin) has certain attributes, or, (b) the subject's evaluation of that variable. If this were the case, it would be expected that, as the health appeal provided information about negative health consequences, only subjects' health attitudes in the health appeal condition should change while subjects' health attitudes in the social appeal condition should remain unchanged (or vice versa). It is thus unclear from this finding which manipulation message contributed to the obtained increase in health attitude scores.

It might be argued that little or no change occurred in social attitudes because the constructed social message did not contain the appropriate beliefs. This interpretation seems unlikely for the reason that care was taken to include in the social appeal only those social type salient belief statements which were elicited consistently in the pilot session with a sample of heroin users who had not participated in any part of the research carried out for this thesis. It is therefore, unclear why this result was obtained.

Past research by McGuire (1960) and Wyer (1974) suggests that changes in a person's beliefs and attitude often take time to 'filter' through a person's existing cognitive structure. McGuire (1960) argued that laboratory cognitive consistency manipulations may not show their full effect for a week. This may result in reduced consistency between belief structure change and corresponding attitude change found by some researchers at immediate post-test time but not at delayed post-test times (when messages have had time to filter through). For example, in an experimental test of salient beliefs and attitude change concerning an over-the-counter analgesic product, Polmazal (1983) found that A act = b e were higher at a delayed post-test time than at an immediate post-test time.

Ideally, a delayed post-test should have been conducted in the present experiment to determine whether this phenomenon may have occurred, (particularly for the social appeal condition). Such a post-test was attempted. However, due to lack of response from subjects (only two subjects kept their appointment for a follow-up interview one week later) such a comparison was not possible. Fishbein and Ajzen (1975) however, make no statement about the requisite time interval between presentation of a persuasive message and subsequent attitude changes. Thus, attitude change was expected in the immediate

post-test session.

From an examination of the two independent components of attitude, (i.e., the belief component and the evaluation component), the results reveal that only the belief component of attitude was influenced by the persuasive appeals. The evaluation component analyses yielded non-significant results. This finding is important for those who are concerned with changing heroin users' attitudes about the consequences of using heroin. From this finding, it appears that the critical variable to be attacked by an influence attempt should be the belief variable. For example, if a heroin user has a belief strength of 5 that heroin will result in premature death, it appears that the main objective of the educator would be to increase this belief strength in order to produce a change in this particular attitude. Attempts to change the evaluative component, it appears, will be ineffective in producing a subsequent change in attitude and will be rendered redundant.

From an inspection of the results for the different sub-sets of belief component scores, it seems that both appeals were successful in influencing subjects' health belief component scores (Table 27) and advantage belief component scores (Table 29) after exposure.

The most striking effect to emerge from the

ananyses as a whole is the large subject differences which existed between the two groups. Subjects in the social appeal condition consistently scored higher on the attitude questionnaire both before and after exposure to their appeal than subjects in the fear appeal condition. This is evident from the results of total belief component scores (Table 24), health belief component scores (Table 27), and social belief component scores (Table 28). Since allocation of subjects to their respective conditions was completely random, and there does not appear to be a great difference in subjects, as far as sex, age, employment state, social class, (see Table 22) between the two conditions, an explanation for this finding cannot be given.

Turning now to heroin users' intentions with respect to their use of heroin in the next three months. The model predicts that a change in the primary beliefs which underlie the attitudinal or normative component is likely to be reflected in change in the person's intention to perform the behaviour, and subsequently the behaviour itself. Subjects' health attitudes, health beliefs, and advantage beliefs changed after exposure, irrespective of type of appeal, suggesting that sufficient change in the primary beliefs underlying these items was produced. From this finding, it would be expected that any intention change to occur after exposure

should occur for both conditions. The results from this analysis revealed there to be a significant effect for time suggesting that both groups increased their intentions to stop using heroin in the preceding three months after exposure to the appeals. It thus appears that both appeals had an effect on subjects' intention measures. However, from an inspection of the result for the interaction it appears that the fear appeal was slightly more successful than the social appeal for producing this effect.

According to the theory, a person's intention to perform any behaviour is determined by his/her attitude towards performing any behaviour and his/her subjective norm. A given variable will thus have an effect on intention only if it meets one of the following conditions:- (1) it influences the attitudinal component, and that component carries a significant amount of weight in determining the intention; (2) it influences the normative component, and that component carries a significant amount of weight in determining the intention; (3) it influences the relative weight of these two components. It may be argued that the findings of no change in either conditions for the intentions to decrease and increase heroin use was due to inappropriate consideration of these two components. This interpretation seems unlikely for the reason that the 'determinants of intention' post study revealed that these intentions are under attitudinal control (see Table 19).

Overall, the present findings present a somewhat mixed picture of the role of persuasive communication in changing attitudes and intentions of heroin users. In spite of this, however, the findings are encouraging. It appears that some attitude change was observed for health attitudes, health belief component scores, and advantage belief component scores, with the fear appeal being marginally more effective for producing these changes. This was reflected in subjects' intentions - particularily in the fear condition - to stop using heroin. These findings suggest that carefully constructed persuasive appeals, constructed from the beliefs of the population of interest, can have a positive effect on their attitudes and intentions.

The biggest problem, perhaps, in assessing just what the results reveal is that no control group was run. The reason for this was due to the shortage of heroin users, which resulted in limitation of time on the part of the researcher.

Although the experiment tested the relative effectiveness of two types of persuasive appeals, in this experiment there was one good reason for requiring a control group. The differences found in subjects' health attitudes and advantage beliefs resulted from exposure to both types of appeals.

Consequently, these changes cannot be attributed to one single type of message. The absence of a control group means that it cannot be assessed whether these items changed simply because of exposure to a persuasive appeal (irrespective of content). In addition, a control group may have shed some light on the reason for the idnividual differences between the two groups and thus, enabled a more clear cut interpretation of the findings.

In sum, the data extends partial support for the Fishbein and Ajzen's model to a new behaviour, heroin use. Changes in determinant modal salient health beliefs appear to modify health attitude items and advantage belief items. This was subsequently reflected in intentions to stop using heroin. However, the finding that health attitudes changed in the social appeal condition, cannot be clarified by this study. It appears that, irrespective of type of appeal, subjects changed their health attitudes and advantage beliefs, but do not change their social attitudes. One reason for the weak findings in the present experiment is that 'cognitive inertia' (discussed earlier) may have operated. Perhaps social attitude change would have occurred, with a corresponding positive intention change, at a later date. Further research may clarify this point.

The success with family planning encouraged

Jaccard (1975) to suggest that the model be applied to the study of many health care behaviours. Subsequent successful applicability of the model to blood donations (Pomazal and Jaccard, 1976); marijuana use (Bearden and Woodside, 1978; Pomazal and Brown, 1977) and alcohol use (Schlegel, Crawford and Sanborn, 1977) have demonstrated the health behaviour that can be explained by the model. Health care frequently requires the initiation of new behaviour; the model's ability to suggest intention change strategies may make it useful in efforts to initiate new behaviour. The present study's support for the model's assumption about intention change should encourage its continued application and extension in health care settings.

Apparently, efforts to fully implement and test the model's applicability to heroin use must have to wait until successful manipulation of salient beliefs has been developed.

One direction for future research is suggested by studies initiated by Nisbet and Borgida. Statistical information about the behaviour of other individuals, they noted, has little impact on decision making (Nisbett and Borgida, 1975). Borgida and Nisbett (1977) demonstrated that concrete information high in sensory vividness from a single experimental source had a much greater effect on decisions that statistical information based on samples of

individuals. Similarily, Tones (1979) argues, that where information requires complex processing, and is designed to produce changes in health habits, personalized health education methods yield the most effective results. The effectiveness of this approach, he argues, stems from personalized interactions (i.e. the educator has the opportunity to gain feedback from the person and can provide an appropriate response). For Tones (1981), the role of people in initiating change in behaviour is of the utmost importance. It may be, that a recommendation with concrete information would have more effect on beliefs, than the more general information used in the present study. Most prior manipulation has concentrated on presenting statistical information, rather than personal appeals from experienced individuals. Fishbein and Ajzen (1975) suggest the statistical approach. In the light of the current findings, application of the Nisbett and Borgida personal experience approach may prove more effective.

Although the present study does not fully bear out Ajzen and Fishbein's (1980) contention that the 'ultimate determinants of any behaviour are behaviour beliefs concerning its consequences and normative beliefs concerning the prescriptions of others', (Understanding Attitudes and Predicting Social Behaviour', 1980, p239), the present study has gone some way towards pointing out, that the salient beliefs held by heroin users, that are relevant to

heroin using behaviour, are of both a social nature, and a health nature and are under attitudinal control. These beliefs should form the focus of any attempt at persuasive communication designed to change heroin using behaviour.

# CHAPTER TWELVE

## 12. EXPERIMENT IV: DETERMINING THE RELATIVE ROLES PLAYED BY HEALTH CONSEQUENCES AND SOCIAL CONSEQUENCES IN INFLUENCING DECISIONS TO STOP TAKING HEROIN

### 12.1. Introduction.

Most health educators working in the field of addiction, would not deny, that the most discouraging prospect of an educator is to 'unhook' heroin users. The previous experiment tested the respective efficacy of a fear appeal and a social appeal in changing current heroin users' attitudes and intentions, with respect to using heroin in the following three months. In general, the findings suggest that the fear appeal was marginally more successful than the social appeal in producing change. Overall, change was detected in subjects' health attitudes; health and advantage belief component scores and intentions to stop using heroin after exposure to the health appeal. However, the social appeal was not without its influence. Changes were detected in subjects' health attitude scores, and health and advantage belief component scores, after exposure to the social appeal, albeit, to a lesser degree than after exposure to the fear appeal.

These findings are important for two reasons.

Firstly, they lend support to the contention of Fishbein and Ajzen, that attitude change can be produced if careful selection of the appropriate beliefs is carried out. Secondly, the results illustrate that by emphasising social factors as well as health factors can have an effect on heroin users' attitudes towards using heroin. This finding suggests that both health and social factors should be considered, before attempts are made to produce attitude change with respect to heroin using behaviour.

What was not demonstrated from the previous experiment, however, is the relative importance of the fear factor and the social factor, in influencing heroin users' ultimate decision to completely give up using heroin.

It is thus of interest to this research (and to those involved in designing communications aimed at changing heroin using behaviour) to have some indication of the relative contributory weights of these two sets of beliefs in influencing decisions in the domain of drug use.

It was decided to carry out this investigation on a group of ex-heroin users. The rationale underlying this decision stems from the fact that ex-heroin users have made the decision to stop taking the drug. They are, therefore, an experienced group in the position

to comment on which factors they felt influenced their decision to come off drugs.

## 12.2. Aim of the Present Study

The aim of the present study is to determine whether negative social consequences, or, negative health consequences, or, both played a significant role in influencing ex-heroin users decisions to stop taking heroin.

## 12.3. Method

Experimental Design. As the study was concerned with finding out, whether health factors, or, social factors, or, both, influenced heroin taking decisions, the experiment used a within subjects design.

Subjects. The source of data for this study was a sample of 34 ex-heroin users contacted through a residential rehabilitation centre, drug centres, and by personal contact. The rehabilitation centre used was Kilmahew House, Cardross, and the centres used were The Saint Enoch Society, and Alban House. All subjects had been drug free for periods ranging from 4 months to 12 years. Table 31 gives a description of the sample, classified by age, sex, social class, marital status, employment status, mean time using drugs (in years), and mean time clean of drugs (in

years).

Table 32: Detailed Description of the Subjects who Participated in Experiment IV

Mean Age: 21.3 years

Sex: 74.1% male, 28.6% female

Social Class: 1&2, 11.4%; 3, 48.5%; 4&5, 40.1%

Marital Status: 25.7% married, 74.3% single

Employment Status: 14.3% employed, 85.7% unemployed

Mean Length of Time Using Heroin: 4.87 years

Mean length of Time Off Heroin: 1.23 years

(N=34)

Material. The material used in the present study was the set of salient beliefs elicited from current heroin users, as being associated with using heroin (see Experiment III: study (b). Each belief was incorporated into a statement which described an event (either social or health). The subjects' task was to rate how important each belief statement was in contributing to their decision to stop using heroin. Each statement was followed by a seven-point scale labelled, very little effect - a lot of effect. An example of the questionnaire appears in Appendix 15.

Procedure. Subjects were informed that the study was interested in getting some indication of the types of factors, which they believed contributed to their

decision to stop using heroin. All questionnaires were completed individually, either at the source of contact or, in the subjects' homes. Although the questionnaire was designed to be self-administered, the author remained with subjects to answer any questions. The questionnaire took about 15 minutes to complete and anonymity was assured.

## 12.4. Results

In order to determine whether differences existed between the two sets of statement types, a t-test (matched pairs) was carried out on subjects' total scores. Table 33 shows the result of this comparison.

Table 33: Comparison of the Two Different Types of Belief Statements - Ex-Heroin Users

| | Mean | Sd | t value | df | p | N |
|---|---|---|---|---|---|---|
| Health items | 23.94 | 10.43 | 2·66 | 33 | <0.001 | 34 |
| Social items | 51.00 | 12.91 | | | | |

From Table 33, above, it can be seen that ex-heroin users rated social events as contributing more to their decision to stop using heroin, than the 'fear for health' events.

A 2-way Analysis of Variance (repeated measures) revealed that there was no significant differences for

subjects' evaluations scores for the two different types of events, confirming that subjects who had been off heroin for more than one year did not appear to respond differentially from subjects who had been off heroin for less than one year.

A significant main effect was found for type of events, $F=126.82$ $p<0.001$, revealing that all subjects evaluated the social events as being more influential in their decisions to stop taking heroin.

A significant interaction effect was found for type of events, and length of time off heroin, $F=4.20$ $p<0.005$. Figure 9, presented on the following page, illustrates the nature of this interaction to be 'cross-over' in fashion: such that those who had been off heroin for under one year evaluated the health events slightly higher than the social events, whereas, the opposite held true for those who had been off heroin for more than one year. Table 34 gives a summary of these findings.

Figure 9: Ex-Users

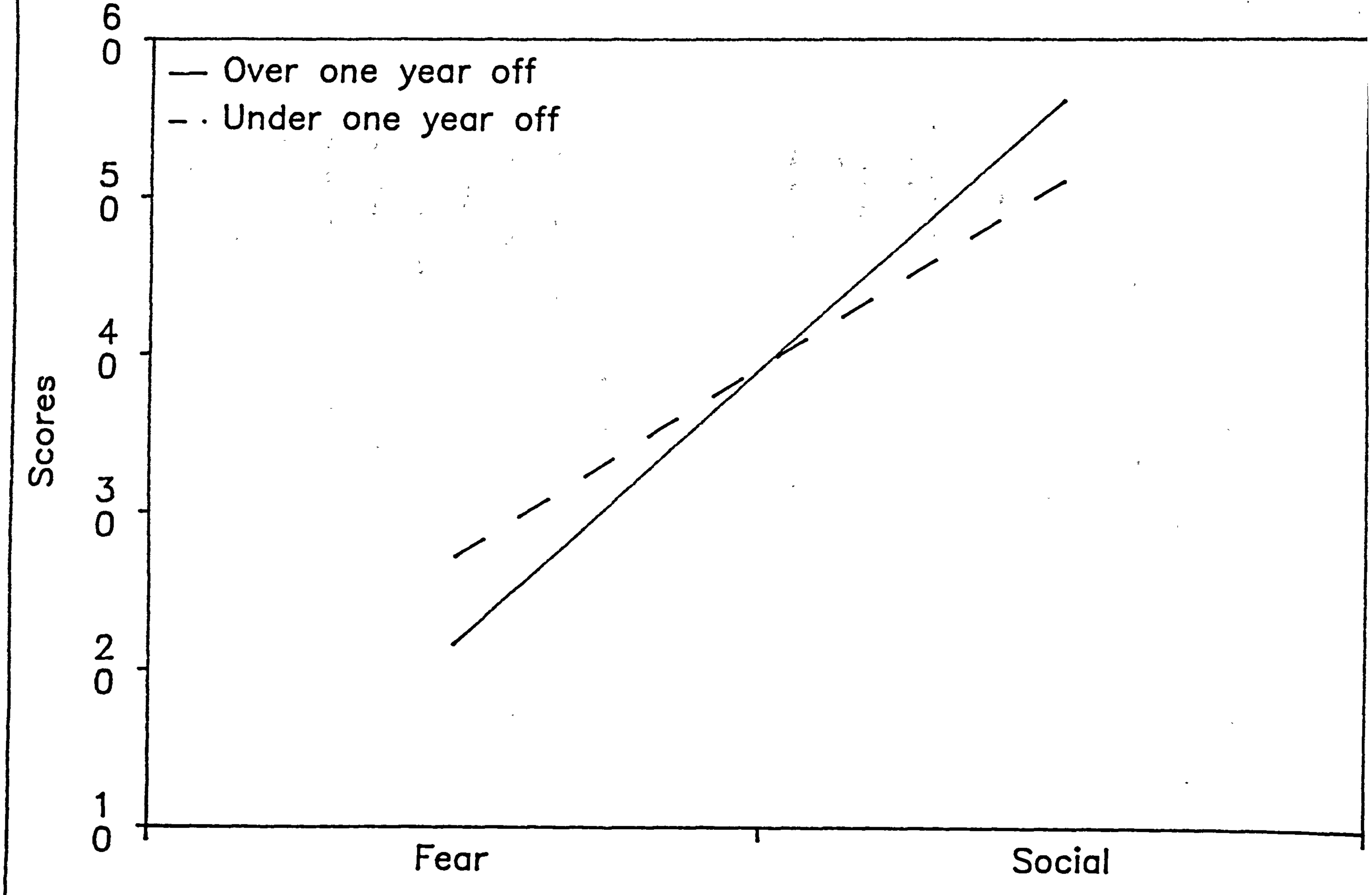


Table 34: Two-way Analysis of Variance (repeated measures) for Length of Time Off and the Two Different Types of Belief Statements

| source | ss | df | ms | f | p | N |
|---|---|---|---|---|---|---|
| bet sub | | | | | | |
| time off | .94 | 1 | .94 | .00 | ns | 34 |
| sub within groups | 3761.0 | 32 | 117.5 | | | |
| within sub | | | | | | |
| event type | 14705.8 | 1 | 14705.8 | 126.82 | <0.001 | |
| time x event | 487.11 | 1 | 487.11 | 4.20 | <0.005 | |

## 12.5. Discussion

The results from these data indicate that ex-heroin users regard negative consequences of a social nature, e.g. loss of interest in the opposite sex, relationship problems, financial and legal problems etc., as being major contributory factors in their decision to stop using heroin. Negative health consequences, e.g. fear of contracting AIDS, liver damage etc., were regarded as having little contributory value to their decisions. It thus appears that negative social consequences seem to play a significant role in ex-heroin users' decisions about coming off the drug.

It is acknowledged that drawing conclusions from a study which is retrospective in nature, and without

corroborative evidence, can be regarded, at the very most, as being tentative. It could well have been the case that subjects reported that negative social consequences associated with using heroin were the greatest contributors to their decision to stop using heroin because it served some psychological function for them.

Factors such as self-presentation, enhancement of self-esteem, response bias etc., cannot be ruled out from the results of the present experiment. For example, presenting oneself as being altruistic and considerate towards others i.e. family, partner etc., may have enhanced subjects' self-esteem considerably more than presenting oneself as being afraid of, for example, contracting or dying of AIDS. Unfortunately, the results of the present experiment cannot refute, or, confirm, whether such variables played a significant role in subjects' responses.

Whatever the truth of the matter, however,the findings from the present experiment, together with the findings from Experiment 111: study (b) and study (c), suggest that negative social consequences are clearly associated with using heroin and appear to influence decisions about coming off the drug.

There appears, therefore, to be evidence for the view that, not only is the physical health of the

users at stake, but also his/her social wellbeing. Such consequences, however, appear by and large to be ignored by those involved in designing education material aimed at discouraging drug abuse. Threat to, or, fear for, one's health is the commonly used strategy in persuasive attempts against drugs. More often than not, little is said about the heartbreak to family, financial problems, broken relationships etc., which can, (and often does) occur as a result of drug use.

One particular example of the 'fear for health' strategy is the Government's present (1987) campaign directed at current intravenous drug users, designed to reduce (or stop) the spread of AIDS. The campaign, which takes the form of short television commercials, and channelled to the public via the medium of television and pamphlets, explicitly concentrates on very negative health consequences associated with the sharing of hypodermic syringes. The recommened way of avoiding these consequences is to stop sharing needles.

The results of the present Experiment and Experiment 111 study: (b) however, suggests that concern about contracting AIDS, (or premature death as a result of drugs), is not on the priority list of those who have given up drugs. As an aside point, in the author's experience of questioning current drug users about the potential risk of AIDS, their response is to the effect "we don't think about that, we only

think about where and how we'll get our next hit".

Apart from the Government's 1987 campaign against AIDS, most of the literature available to those attending drug centres or clinics for a drug problem, invariably concentrate on the health hazards associated with drugs. This literature usually takes the form of a pamphlet depicting a ghoulish skeleton and carries a message with the implication that the skeleton was a live heroin addict. Examples of such pamphlets are presented in Appendix 16.

The truth of the matter is, that death due to the direct effects of drugs in Britain number about two to three hundred per year, (it should be bourne in mind that this is a very small number in relation to deaths as a result of alcohol and tobacco). More die through the injection of impure substances. This point is not intended to undermine the health consequences, which may arise as a result of drug abuse, but merely to highlight that they are not inevitable.

The point being made is, that messages which are imbalanced, or, overstress the seriousness of some consequences, at the expense of other (perhaps more important) consequences, will be perceived by the target group, as being inaccurate, and will conflict with their typical experiences. This may result in alienating the audience and thus render the attempt to

change heroin using behaviour as a waste of time.

Reasons as to why there is a prevailing ethos that 'fear for health' is the most popular strategy to combat a drugs problem will be discussed in the following chapter.

# CHAPTER THIRTEEN

# 13. REASONS FOR THE PREVAILING ETHOS OF FEAR APPEALS

## 13.1. Introduction

The efficacy of arousing fear in an individual, in an attempt to dissuade a particular behaviour, has received its fair share of examination. As was discussed in chapter 8, the results from research to date, are conflicting and equivocal However, such studies, include both attitudes and behaviours related to such diverse topics, as dental hygeine, tetanus innoculation, safe driving practices, the viewing the sun during an eclipse. Many researchers have pointed out, that unless the behaviour, which the message is intended to change is taken into account, the message will be rendered redundant. For example, performance of certain behaviours is supported by socially symbolic meaning, and these will be more difficult to change than behaviours which are not. Drinking, for example, amongst adolescents, is partly motivated by the belief that drinkers are tougher, mature, and more attractive sexually, than adolescents who do not drink, (Davies and Stacey, 1972). Such factors are very important for adolescents, probably just as much as the drink itself. Because of this, emphasising fear for one's health will most probably be ineffective in changing young people's drinking behaviour. But being warned about the dangers, which could arise from

failing to get a tetanus injection after some injury, does not carry such symbolic meaning, and thus may respond to fear. It is therefore important that, in the area of addiction, factors such as motivation, etc., must be considered before any success can be expected.

Similarily, the underlying beliefs regarding the consequences of a particular behaviour have to be considered, before any change can be expected. It is thus imperative, that any persuasive appeal, whether it is fear arousing or not, designed to influence a particular behaviour, must be based on systematic prior research, which identifies the critical underlying variables. The picture which emerges from most drug campaigns, designed to alleviate the problem of drugs is that, rather than being based on systematic prior research, they are designed from a feeling that 'something has to be done', and this 'something' is best accomplished by emphasising fear for one's health.

The reasons for the initial preference for fear arousal in the recipient, in the hope to dissuade drug abuse, is, at present, unclear. One possible explanation for this may be found in the disquiet expressed by researchers regarding the designing of health messages. One serious problem cited in the literature as being associated with persuaive appeals,

is that the messages designed to influence behaviour, are written intuitively, rather than being based on systematic prior research. This point is important, as many researchers (particularly working in the area of smoking) have stressed that the factors underlying the initiation of a behaviour, are very different from those underlying the maintenance or cessation of that behaviour. And, factors influencing one person's decision to perform, or, not to perform a given behaviour, may be very different from the factors that influence the same decisions in another person. This is particularly important when a problem such as drug abuse is being considered. The wrong message at the wrong time, directed at the wrong person, will not only be ineffective, but may also be potentially harmful. This fear has been cogently highlighted by Davies's Cautionary Tale Number 2:

> 'A farmer saw a tom-cat in his hen pen. He took out his shot-gun and aimed carefully at the cat. When he pulled the trigger the cat fell down. So did sixteen chickens.' (1986)

The phenomenon that drug education programmes may induce experimentation in certain individuals, is not new. Kinder, Pape, and Wallfish's (1980) review of the effectiveness of drug education programmes highlight this point. (See chapter 8).

A second possible reason for emphasis being placed on serious health consequences may arise from

the way in which some drug education programmes are evaluated. Most large scale drug education programmes are evaluated by a sample of the lay public, whose opinion designates the programme 'a success' or 'a failure'. One example of such an evaluation study was the one carried out by the Advisory Research Unit at Strathclyde University on the Government's (1986) health education and information campaign to discouage drug misuse. The report from this evaluation study stated that, among other things, the campaign resulted in a "markedly increased tendency for the people to see drug problems in terms of the health risks related to drug use" No mention was made of potential social risks. The implication from this finding is that the campaign, to date, had been a success. If such a finding is taken as an indication of the success of the programme, the next logical step would be to heighten this health risk awareness even further. A step which may (a) have no effect on the appropriate target groups, (b) only have an effect on those who are not a risk group to begin with, or (c) have a counter-productive effect and exacerbate the problem.

A third possible reason for preference for the 'fear for health' approach may stem from the 'information' about drug use channelled to the lay public via the media. More often than not, the lay public are exposed to biased 'facts' about drug use and drug users. Invariably, this information shapes

people's attitudes in a non-helpful way (Tones, 1981).

For example:

> 'The Scourge of Heroin - Baby Gavin: Heroin Addict',
> (Mirror, 28th November 1974);
>
> 'My Boy's as Good as Dead - At First I Thought He Was On Soft Drugs....Then I found Out',
> (Daily Record, 4th April, 1984);
>
> 'Life for Drug Pushers - Tories Crack Down on Evil Plague',
> (Mail, 10th October, 1984);
>
> 'Dead in Each Others Arms - Heroin Horror of Teenage Sweethearts',
> (Daily Record, 14th August, 1984);
>
> 'Heroin Killed My Kids',
> (Daily Record 4th April, 1984)
>
> 'The Mini Addicts',
> (Evening Times, Glasgow, 19th December, 1984);
>
> 'Hooked on Heroin - At Only 13',
> (Daily Record, 19th December, 1984) etc.

Such sensationalized facts about the dangers of drug abuse obscure the true facts and unavoidably colour the opinions of those who do not use drugs. This will be reflected in the lay public's opinions with regard to combating the problem of drugs. As was mentioned earlier, the truth of the matter is that few people die each year from the direct effects of drugs (particularily in relation to tobacco and alcohol). More die through injection of impure substances. Experiment 111: study (b) clearly showed that social harm was regarded as being of as much concern to heroin users as physical harm. Thus, drugs campaigns which have been constructed intuitively, and evaluated by a population who, for various reasons, are ill-

equipped for the job are (a) doomed to fail before they begin and (b) may in fact be dangerous.

## 13.2. Experiment V: An Investigation into the Lay Public's Opinion Regarding the Relativeness Effectiveness of the Fear Appeal and the Social Appeal

In the light of what has been said above, it was of interest to this research to obtain a measure of the lay public's opinion regarding the effectiveness of the two appeals used in Experiment 111: study (c). Both appeals were constructed from systematic prior research and contained the salient beliefs held by heroin users about the negative consequences associated with using heroin. If the lay public are a suitable sample to evaluate the effectiveness of drug campaigns impartially, it would be expected that no differences would be found between their ratings for the two messages.

In addition to obtaining a measure of the lay public's opinion regarding the effectivenes of the two appeals, the investigation was also interested in obtaining a measure of which particular message the lay public preferred to be used in a 'fight against drugs' campaign. Although a person may be of the opinion that one message may be more effective than the other in changing heroin taking behaviour, it may,

in fact, not be the message which he/she prefers. By giving the lay public a choice of preference, it was felt by the author, that a clearer understanding about how this group felt regarding the two appeals would emerge.

Finally, since Experiment 1 revealed that heroin users are perceived by the lay public in a very negative way, there was the added interest of finding out which of these two appeals the lay public regarded as describing the true outcome of someone who had become 'addicted' to heroin.

## 13.3. Hypothesis

If the lay public are a suitable sample to evaluate the effectiveness of drug campaigns, it would be expected that (a) no differences would be found between their ratings for the two message types, (b) there would be no preference for one type of message over the other and (c) both messages would be regarded as containing some truth about the expected outcome of someone who had embarked on a heroin using career.

## 13.4. Method

Experimental Design. As the experiment was interested in obtaining a measure of opinions about the perceived effectiveness of two different types of appeals; which of the two appeals reflected the truth

about someone who had become 'addicted' to heroin; and which message was preferred to be used in a campaign against drugs, the experiment used a within subjects design.

Subjects. The procedure for obtaining the sample was identical to that of Experiemnt 11: Part 111. The geographical areas choosen for this study were: Shawlands; Govanhill; Jordanhill; Kelvinside; and Easterhouse. 83 subjects took part in the study. The minimum age for subjects was 20 years. Table 35 below provides a detailed description of subjects classified by sex, age, marital status, employment state and social class.

Table 35: Classification of Subjects who Participated

Experiment V

Mean age : 36.7 years

Sex: 42.2% male, 57.8% female

Social Class: 1&2, 37.3%; 3, 47.7%; 4&5. 15%

Marital Status: 65.2% married, 34.8% single

Employment Status: 59% employed, 41% unemployed

Procedure. Subjects were informed that the study was interested in examining the relative effectiveness of two different types of anti-drugs messages in persuading people against using heroin. They were told, that in order to carry out this examination, an indication of non-drug users' opinion

would be helpful. Subjects who agreed to participate in the study were given a booklet which contained the two appeals. The booklet was in two parts and was constructed as follows: page 1 obtained demographical information. The following pages contained either the fear message, or, the social message followed by seven questions. The questions assessed the effectiveness of the appeal on a seven point scale labelled, very effective - very ineffective. The mid-point of the scale served as a don't know mark. The following are the statements used to assess the effectiveness of the appeal:-

1. How effective do you think this type of message would be in persuading heroin users to cut down on the amount of heroin they use?

2. How effective do you think this type of message would be in persuading heroin users to completely stop using heroin?

3. How effective do you think this type of message would be in preventing individuals from starting to use heroin (or any drug)?

4. How effective do you think this type of message would be in persuading individuals to think about cutting down the amount of heroin they use?

5. How effective do you think this type of message would be in persuading heroin users to think about stopping their use of heroin completely?

6. How effective do you think this type of message would be in persuading individuals to think twice before they decided to try heroin (or any drug)?

7. How effective do you think this type of message would be in persuading individuals to seek help for their drug problem?

The second half of the booklet contained, either the fear appeal, or, the social appeal followed by the same seven questions. Allocation of appeal type into the booklet was entirely random. The final page of the booklet obtained a measure of preference, i.e. which message was most preferred by subjects to be used in a drugs campaign, and a measure of which message, subjects thought reflected the truth about what happens to a person who becomes dependent on drugs.

The questionnaire took approximately 25 minutes to complete. As no name was required on the questionnaire subjects were assured anonymity. An example of the booklet used appears in Appendix 17.

## 13.5. Results

In order to determine whether there was any difference in subjects' ratings on the effectiveness of the two appeals, a t-test (matched pairs design) was carried on subjects' total scores for the two appeals. The results of this comparison are shown in Table 36 below.

Table 36: Comparison of Subjects' Total Scores for the Two Appeals

| message type | mean | sd | t | df | p |
|---|---|---|---|---|---|
| fear | 33.67 | 8.99 | 7.02 | 73 | <0.001 |
| social | 26.51 | 9.25 | | | |

(N=74)

It can be seen from Table 36 above, that the fear appeal was overwhelmingly rated as being the more effective of the two in influencing heroin using behaviour. This analysis, however, does not reveal subjects' feelings regarding the appeals' effectiveness in influencing the different behaviours in the domain of heroin use, e.g., decreasing dosage, stopping, prevention etc. In order to determine this, a series of t-tests (matched pairs) was carried out on each of the seven individual items. The results of these analyses are shown on the following page.

Table 37: T-Test for the Seven Individual Items

| Message Type | mean | sd | t | df | p |
|---|---|---|---|---|---|
| item 1 | | | | | |
| fear | 4.59 | 1.63 | 5.77 | 81 | <0.001 |
| social | 3.54 | 1.76 | | | |
| item 2 | | | | | |
| fear | 3.86 | 1.87 | 4.30 | 82 | <0.001 |
| social | 2.95 | 1.76 | | | |
| item 3 | | | | | |
| fear | 5.48 | 1.47 | 5.29 | 79 | <0.001 |
| | 4.48 | 1.60 | | | |
| item 4 | | | | | |
| fear | 4.71 | 1.60 | 4.86 | 82 | <0.001 |
| social | 3.78 | 1.64 | | | |
| item 5 | | | | | |
| fear | 4.31 | 1.80 | 3.94 | 82 | <0.001 |
| social | 3.55 | 1.78 | | | |
| item 6 | | | | | |
| fear | 5.59 | 1.44 | 4.35 | 78 | <0.001 |
| social | 4.64 | 1.71 | | | |
| item 7 | | | | | |
| fear | 5.00 | 1.63 | 4.78 | 76 | <0.001 |
| social | 4.02 | 1.63 | | | |

Numbers in above table differ due to varying amounts of missing data.

Table 37 above, shows that non-heroin users rate the fear appeal as being the most effective in influencing all behaviours of interest in drug abuse.

In order to determine which of the two appeals the lay public preferred to be used in a campaign against drugs, a frequency count was carried out on subjects' 'preference' scores. Table 38 shows the

result of this frequency count.

Table 38: Frequency Table for 'Message Preferred'

| | frequency | percentage |
|---|---|---|
| fear | 68 | ৪১·৭ % |
| social | 6 | 7·2 % |
| both | 3 | 3·6 % |

In order to determine which appeal the lay public felt best described the problems a drug user may encounter in the course of being 'addicted' to heroin, a frequency count was carried out on subjects' 'reflects the truth' scores. The results of this frequency count are shown in Table 39 below.

Table 39: Frequency Table for 'Reflects the Truth'

| | frequency | percentage |
|---|---|---|
| fear | 61 | 73·5 % |
| social | 11 | 13·5 % |
| both | 5 | 6·0 % |

The Tables 38 and 39 above show that subjects preferred the fear appeal and they felt that this appeal reflected the truth about a person involved in heroin. To determine whether the subjects who preferred the fear appeal were the same subjects who felt that it reflected the truth, a Kappa coefficient

was carried out on subjects' scores for these two questions. The results of this analysis is presented in Table 40 below.

Table 40: Kappa Coefficient on Agreement of 'Preference' and 'Reflects the Truth'

| count | message preferred | | | |
|---|---|---|---|---|
| | fear | social | both | raw total |
| fear | 59 | 2 | | 79·2 |
| social | 8 | 3 | | 14·3 |
| both | 1 | 1 | 3 | 6·5 |
| | 88.3 | 7.8 | 3.9 | |

Percentage agreement = 84.4

Percentage change = 71.3

Kappa = .456

SE Kappa = .086

Z = 5.284

p=<0.001

The results form the Kappa Coefficient demonstrates that those subjects who preferred the fear appeal, also thought that drug users experienced serous health consequences as a result of their heroin taking behaviour.

13.6. Discussion

The purpose of the previous experiment was to

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its potential problems would be the best judge of choice. If this were the case, then the ex-heroin users' opinion should be the opinion sought. However, in light of the methodological problems, this, in fact, may not be a reliable source for such critical information. This concern, however, is attenuated to a certain degree when the results of Experiemnt 111: studies (b) and (c) are considered. Clearly, consequences associated with using heroin are of a social type and a health type. Thus, both are important factors which have to be considered, when designing a communication programme aimed at dissuading heroin using behaviour. It may well be that the critical factors involved, in inducing actual change, are factors which take into account problems with family, partner, finance, etc., coupled with factors which highlight health factors.

Three points arise from the findings of the present Experiment. As has been discussed above, many researchers in the field of attitude and behaviour change have stressed the need for a distinction between behaviours. Very different factors underlie different decisions to perform or not to perform a ,specific behaviour, i.e. the factors underlying the decision to stop using heroin may be very different from the factors which underlie its continuance. Thus, the first important aim of the educator is to establish the target group, the behaviour to be changed, and accurately identify the critical factors

which underly the behaviour, e.g. motivation, whether under attitudinal or subjective control, social factors, etc. Thus, one of the main reasons given for the ineffectiveness of drug education programmes is the failure to identify the 'active ingredients'. If such steps are not taken, the message will be ineffective and redundant, and, in some instances, may have a detrimental effect.

It is clear from the results of the present Experiment that the lay public did not discriminate between the three different types of behaviour. For them, the fear appeal was regarded as being the most effective appeal irrespective of whether it was directed at prevention, decreasing heroin use, or, stopping heroin use.

Secondly, in contrast to the belief of the lay public that the fear appeal is 'best', the results from Experiment lll: study (c) demonstrated this not to be the case. Although the fear appeal was marginally more successful than the social appeal, in changing heroin users' attitudes towards using heroin, the social appeal was not without its influence.

Thirdly, if one considers the biased 'facts' about drug use, which the lay public are exposed to, via the mass media, it is not surprising that they are

of the opinion that emphasising negative health consequences is the best technique to adopt. Experiment 111: studies (b) and (c), and Experiment 1V demonstrated that concern for their social wellbeing is equally important for heroin users, as is their physical wellbeing and hence, a critical factor. These factors, however, are considered, by and large, to be inferior.

For a researcher involved in the evaluation of drug education, special concern is given to the validity associated with statements concerning drug education. If an opinion is expressed concerning the effectiveness of drug education, for example, 'that the programme has been valuable in dealing with drug abuse' it will be asked, 'what is the evidence, how do we know'? Associated with this question are others: 'how good is the evidence? How confident are we that the opinion is correct' and 'what are the grounds for this confidence'? The only grounds on which judgement can be passed, concerning the correctness of opinions regarding the effectiveness of a drug campaign, is the weight of evidence supporting such statements. The results of the present study indicate that the lay public's opinion regarding the effectiveness of a drug campaign is of questionable validity. In spite of this, data are consistently obtained from this group to assess the impact of drug education.

It should perhaps be borne in mind that data

obtained to assess the impact of a drugs campaign, derived from canvassing the opinions of a sample of the population, are nothing more or nothing less than opinions. Their validity and usefulness are those of any opinion expressed by interviewers in any such study. They may be, more or less, valid and useful, depending on the factors associated with good sampling techniques. In soliciting the opinions concerning the effectiveness of drug education programmes, the value of the results will depend especially on the knowledge of the interviewee and on their ability to correctly interpret the indicators of effective outcomes. Opinion surveys, however, possess no intrinsic ability to provide accurate information nor, more importantly, do they provide an assessment of the validity of the opinions expressed. The value of survey studies in determining the effectiveness of drug campaigns is therefore limited by the unknown probability error inherent in such designs.

In addition, Experiment 1 clearly showed that heroin users are viewed in more negative terms than alcoholics and smokers. That such a view exists, suggests that drug addiction serves some social function, unrelated to the problem of drug use itself. Unfortunately, the present experiment cannot contribute anything to this speculation apart from reiterating the doubt expressed about the suitability of the lay public as a 'judge' for the effectiveness

of any drug campaign.

The importance of the finding from Experiment 1 in the context of the present Experiment is that, in addition to holding extreme negative views regarding the personality of heroin users, the lay public hold very little hope for their future. As was pointed out above, few people die as a consequence of drugs and there is growing evidence that users of illicit drugs,

> are often able to lead more or less satisfactory lives and, in some instances, successfully run their own businesses. (From research currently being carried out in the psychology department at the University of Strathclyde).

# CHAPTER FOURTEEN

## 14. CONCLUSIONS

The results of the Experiments, which constitute the main body of this thesis, have been discussed in some detail in their respective discussion sections; nothing more would be gained by covering the same ground, or, by simply reiterating in this chapter the discursive comments made above. However, since there are several conceptual and methodological threads connecting these experiments, there does seem to be some merit in the idea of drawing the threads of these experiments into a coherent tapestry. This chapter will, therefore, be brief and will consist of highlighting the main points that emerged from the experiments as a whole.

It is clear that the myth of the 'dope fiend' - which has persisted throughout history - is still undoubtedly with us. The results from Experiment 1, no photo condition, demonstrated that, in the world of aggression, we continue to perceive him/her as one of the most anti-social groups. The differences in attitudes of the lay public toward the 'heroin addict' as opposed to the 'smoker' and the 'alcoholic' tend to support the hypothesis advanced by Szasz (1974) that, 'the important differences between heroin and alcohol or alcohol and marijuana and tobacco - as far as 'drug abuse' is concerned - are not chemical but ceremonial. In other words, heroin and marijuana are approached

and avoided, not because they are more 'addictive' or more 'dangerous' than alcohol and tobacco, but because they are more 'holy' or 'unholy' - as the case may be'.

Descriptions that reiterate Anslinger's ** stereotype of the 'depraved', 'vicious', 'dangerous' drug fiend are worse than useless. In the first instance, these descriptions construct an imagery type with which the drug user can identify. It would not be too far from the truth to say that many drug users are often believers in their own total irreversible slavery to drugs. In Leroy Street's autobiography, 'I became a liar and a thief to support my habit.....I plunged the depths of degredation'.

This theme occurs regularly in 'junkie' conversation: such comments are both a celebration of, and an apology, for the belief that, as a helpless slave to his/her addiction, the 'addict' is not responsible for his/her behaviour. It is a view of drug taking that combines the perverse satisfaction of martyrdom with a powerful rationalization about why it is pointless to try to give up drugs. Such beliefs are both a justification and a trap. They give meaning and significance to drug users' life style, but because they attribute such power to the drug itself, they create a barrier to change.

** Anslinger and Tompkins 1953

In addition to creating a barrier to change within the drug user him/herself, misleading stereotypes results in drug users, as a whole, being viewed in a very negative way. This is reflected in biased attitudes towards drug users which can carry detrimental consequences. These consequences will be discussed at a later stage in this chapter.

According to Tajfel (1979) and his colleagues, (e.g. Turner 1987), the process of social stereotyping is a process impregnated with values, culture, and social representation. Much of what a person believes and feels about stereotyped groups is acquired through social learning processes, and motivation may contribute to the prevailing conceptions of the group.

In addition to the process of acquisition and motivation in the formation and maintenance of stereotypes, lack of personal contact with the stereotyped group and value differentials enhance and perpetuate the prevailing conceptions of the stereotyped group even further.

Tajfel and his colleagues argue that an encounter between two groups in which all the above processes are operating, will be intergroup (as opposed to intragroup) in nature. That is, either one of the groups, or, both groups will be interacting in terms of their group identity. This will be reflected in a clear cut awareness of an ingroup-outgroup dichotomy

with corresponding discrimination.

The results from the first two Experiments suggest that such processes were operating in the lay publics' reactions to heroin users. It was clear from these experiments that subjects were less likely to attribute hostile attributes to heroin users when they received information (i.e. a photograph of a supposed heroin user who had a value system similar to the subject's own value system) which was inconsistent with stereotypic expectations.

These findings lend support to the contention that respondents reactions to heroin users in the no photo condition, probably reflects a misinformed publically held value loaded stereotype of heroin users that is reinforced by criminal role expectancy and misinterpretation of the media.

To the author's knowledge, no research has examined the value differential hypothesis and the interpersonal-intergroup hypothesis in the same experiment. However, the finding that individuation of an outgroup member reduces the amount of bias directed at them is consistent with similar studies in this field. Past research on obedience has shown that the more distant, or, anonymous a victim is, the more readily subjects harm him/her (e.g. Millgram, 1965). Subjects gave more severe shocks to a victim when they

had few cues that would individuate the confederate, (i.e. when the confederate was out of sight) than when they could either see him/her or touch him/her. Similarily, persons are more likely to help others when they know something about them; that is, when the others are individuated (Emswiller, Deaux, and Willits, 1971). In addition, some anecdotal evidence suggests that persons are likely to behave inappropriately towards others who are deindividuated. Guards in the concentration camps treated Jews more leniently when the Jews were more individuated, i.e. the guards knew their names, than when they were anonymous members of the Jewish outgroup Zimbardo (1970), Worchel and Andreoli (1978) reported evidence supporting the reverse argument. When anticipating an aggressive interaction, subjects in their study deindividuated the target group by recalling less information about him than when a more friendly interaction was expected.

It appears thus, the more deindividuated a person is, the more likely one will behave in a negative way towards him/her. Zimbardo (1970) and others, e.g. Festinger, Pepitone and Newcomb (1952); Jorgenson and Dukes (1976); Maslash (1974); have shown that the more individuated persons are, the more likely they will behave in a socially appropriate manner towards a target person. Similarily, it is suggested that the more deindividuated persons are, the more likely they will become a target of socially inappropriate

behaviour. When we interact with members of ingroups we usually know something about the individual members, and we expect them to be similar in many ways to ourselves. On the other hand, we generally have less contact with outgroup members and perceive them in terms of general stereotypes.

In conclusion, Experiments 1 and 2 have demonstrated that personalization of a 'heroin addict', reduces the amount of bias directed at them. This finding appears to be robust in that they were replicated in two experiments. In addition, it was demonstrated that similarity in value systems, plays a crucial role in the stereotyping of heroin users.

As was mentioned above, there are inherent dangers in the lay public holding misinformed stereotypes of drug users. The first of these dangers becomes apparent if one considers drug evaluation studies. In many instances, the lay public play a very active role in the evaluation of drug programmes designed to combat drug abuse. These opinions are subsequently taken as an indication of the 'success' or 'failure' of the particular drug programme in question. Because of this, the public's conceptions about drug use is of paramount importance. Obviously, to be valid those involved in drug programme evaluation studies must, in the very first instance, hold a balanced and realistic view of drug users and

drug use. The findings from Experiment 1 suggest this not to be the case. Overall, the lay public are of the opinion that drug users are, as a whole, dangerous, menacing, etc. An important point to be made at this juncture is that heroin users are more like the rest of us than many of us care to imagine. There are many individuals who have used heroin or other potentially dangerous drugs throughout their lives without suffering any of the physical and mental damage supposedly linked to drug addiction. This is not to say that drug use is not dangerous. Throughout the prodcedure of gathering the data for this thesis, many sad cases as a result of drug use were encountered. However, it cannot be left unsaid that many similar cases were encountered as a result of alcohol. Clearly, an unbalanced and unrealistic view of drug users, makes the task of tackling drug use much more difficult, if not impossible.

A second important danger inherent in the public holding misinformed stereotypes of drug users, is the danger that the stereotype and the images associated with it may, in fact, attract some vulnerable youngsters thereby, exacerbating the drug problem.

In addition to the inherent dangers mentioned above, misinformed stereotypes lead to negative attitudes and, negative attitudes can constitute a major impediment to helping those with an drugs problem. This point is somewhat disconcerting if

Doctor and Sieving's (1973) study (mentioned earlier) is considered. The findings from this study demonstrated that the public were rated by ex-drug users as being more influential in their decision to stop taking drugs than professionals in the field. It follows from this, that the lay public clearly have the ability to assist with the drugs problem by being supportive, sympathetic, and understanding. Such assistance, however, will never be realized until a balanced perspective of drug users is achieved.

The conceptualization of the drug user as a 'hopeless dependent' who should be avoided at all costs, has penetrated many drug education efforts. It is widely assumed that people will be discouraged from using drugs by television advertisements and posters of the 'heroin screws you up' variety. It has been argued, e.g. Dorn (1981) that there is no evidence to suggest that such blanket negative approaches to drug education, discourages drug use.

Many researchers have argued that one of the main reasons for the lack of success in producing effective changes in unhealthy behaviours via drug education programmes, is because many of these programmes are designed intuitively. Within this 'intuitive' approach, emphasis on fear for one's health appears to be the preferred approach. The consequences of such an approach is the failure to identify the critical

ingredients underlying the behaviour to be changed. As a result, the education programme is ineffective in persuading people to change their unhealthy habits.

Fishbein and Ajzen's (1975) emphasis on the mediating role of proximal beliefs in the influence process, suggests a model of persuasive communication that differs considerably from the above traditional approach. Their theory of reasoned action makes it clear that any influence attempts - whether its goal is to change an attitude, norm, intention, or behaviour - must always be directed at one or more of the individual's beliefs underlying the variable in question. The beliefs that an influence attempt is designed to change are called salient beliefs. For example, a persuasive attempt will be successful in changing someone's attitude about smoking to the extent that the target beliefs, the communication is designed to change, correspond to the primary beliefs that serve as the foundation of the person's attitude towards smoking.

Thus, to change a person's attitude it is necessary to know the salient primary beliefs on which the attitude is based, and then to construct a message that provides information which will change the person's subjective probability that the attitude object has certain attributes, or, influence the evaluation of those attributes. Likewise, a subjective norm can be changed by attacking either,

the specific normative beliefs relevant to each important reference person, or, the motivation to comply with a given referent. By changing the beliefs underlying either attitudes or subjective norms, changes in behavioural intentions, and subsequently, behaviour should also be induced.

According to the theory, a person's intention to engage in any given behaviour can be predicted from a weighted combination of two basic determinants, one personal in nature and the other reflecting social influence. When combining these two factors to predict intention, relative weights are applied to each factor which reflects the importance of the factor in explaining intention. The identification of the relative weights of these two components is very important for developing intervention programmes, designed to change behaviour. Clearly, before developing a behaviour change programme, it is essential that the relative importance of attitude and normative considerations relevant to the behaviour and population of interest are clearly identified.

On the basis of the experimental evidence reported in chapter 11, it is clear that heroin user's intention to use heroin is under attitudinal control. It was also demonstrated that the primary beliefs underlying heroin users' attitudes towards taking heroin, are of a health type, a social type, and

advantage type. Thus, in addition to associating negative consquences with using heroin, heroin users also associate some very positive consequences.

The data from the experiment designed to influence heroin users' attitudes, (conceptualizing attitude as a function of salient beliefs and evaluations of these salient beliefs), Experiment 111: study (c) yielded non-significant results. From this finding it appears that neither a fear appeal, nor a social appeal, is successful in their influence attempts.

However, from an examination of the different sub-sets of attitude items (again conceptualizing attitude as a function of salient beliefs and their evaluations), it was revealed that a significant change occurred in subjects' health attitude items (Table 23). (There was no change detected in any of the other sub-sets of attitude items). From this data it appears that both appeals had a positive effect on subjects' health attitude items, with the fear appeal producing more change than the social appeal.

According to Fishbein and Ajzen, attitude can be changed by changing the existing salient beliefs through the introduction of new salient beliefs, or, by changing a person's evaluation of the belief's attributes. Thus, beliefs about the object and attribute evaluations can be viewed as two different

determinants of attitude at which an influence attempt can be directed.

On examination of these two components of attitude, it was revealed that changes were detected in subjects' belief component scores only, (evaluation scores did not change to any significant degree after exposure). In addition, it was found that the fear appeal was marginally more successful than the social appeal for producing these changes. This was subsequently reflected in a change in subjects' intentions in the fear appeal condition to stop using heroin. This finding of the success of the fear appeal in producing change in behavioural intentions, questions the blanket dismissal of fear as an effective motivator for changing behavior. It is clear from the results of this study that fear was associated with an increase in intention and acceptance of the appeal.

In spite of the success of the fear appeal in changing behavioural intentions, the influence of the social appeal cannot be underestimated. Clearly social factors are important to those who take heroin, as Experiment 111: studies (b) and (c) and Experiment 1V demonstrated. In the former of these experiments it was clear that current heroin users associated their heroin use with negative social factors. In the latter of these experiments ex-heroin users rated

social factors as being more influential in their decision to stop taking heroin. These findings suggest that social factors play role in heroin taking decisions.

Admittedly, at present the importance of social factors with regard to heroin taking decisions is, at present, unclear. It may well be that a more balanced realistic perspective should be adopted by drug educators, which highlights the health hazards and the social hazards which can result from heroin use. Or, it may be that, for some individuals, the fear approach may be the best approach to take, and for others, the social approach may be the best approach to take, i.e. 'different strokes for different folks' (Tones 1981).

The above approaches are merely suggestive. In order to clarify the respective roles played by the two sets of factors, much more research is needed.

Finally, it should be stressed that, in our quest for identifying successful techniques for fighting the problem of drugs, we should (a) reconsider the appropriateness of the lay public as a viable source for drug evaluation studies, or, (b) ensure that they have a more realistic view about drug use as a whole.

Drug education is worth pursuing, however, it

must be concluded that, drug education should be conducted in the knowledge of how little has been achieved in the past. Past emphasis has been placed upon frightening people. Future emphasis should be placed on the identification of the appropriate factors underlying drug use. And far more attention in future should be given to keeping education firmly grounded on accurate information, and informing drug users how to avoid harm, and how to minimize drug problems in general.

Advisory Committee to the Surgeon General (Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service. Document No. 1103. Government Printing Office.

Aitken, P.P., Leathar, D.S., and O'Hagan, F.J. (1985). Monitoring Children's Perceptions of Advertisements for Cigarettes. In Leathar, D.S. / Hastings, G.B. / O'Reilly, K.M. / Davies, J.K. (Ed.) Health Education and the Media. Pergamon Press: London:Pergamon Press: London.

Ajzen, I. (1971). Attitudinal vs Normative Messages: An Investigation of the Differential Effects of Persuasive Communications on Behaviour. Sociometry, 34, 263-281 .

Ajzen, I., and Fishbein, M. (1969). The Predicition of Behavioural Intentions in a Choice Situation. Journal of Experimental Social Psychology, 5, 400-416 .

Ajzen, I., and Fishbein, M. (1972). Attitudes and Normative Beliefs as Factors in Influencing Behavioural Intentions. Journal of Personality and Social Psychology, 21, 1-9 .

Ajzen, I., and Fishbein, M. (1973). Attitudinal and Normative Variables as Predictors of Specific Behaviours. Journal of Personality and Social Psychology, 27, 41-57 .

Ajzen, I., and Fishbein, M. (1974). Factors Influencing Intentions and the Intention-Behaviour Relation. Human Relations, 27, 1-15 .

Ajzen, I., and Fishbein, M. (1977). Attitude-Behaviour Relations: A Theoretical Analysis and Review of Empirical Research. Psychological Bulletin, 84, 888-918 .

Ajzen, I., and Fishbein, M. (1980). Understanding Attitudes and Predicting Social Behaviour. Englewood Cliffs, N.J.:Prentice-Hall.

Allen, V. L., and Wilder, D. A. (1975). Categorization, Belief Similarity and Intergroup Discrimination. Journal of Personality and Social Psychology, 32, 971-997 .

Allport, G. W. (1946). Some Roots of Prejudice. Journal of Personality and Social Psychology, 22, 9-39 .

Allport, G.W. (1954). The Nature of Prejudice. New York:Doubleday, Garden City.

Anslinger, H.J., and Tompkins, W.F. (1953). The Traffic in Narcotics. New York:Funk and Wagnells.

Ausabel, D.P. (1958). Drug Addiction: Physiological and Sociological Aspects. New York:Random House.

Bearden, W. O., and Woodside, A. B. (1977). Normative and Attitudinal Control as Moderating Influences on Marijuana use. Journal of Health and Social Behaviour,

Ajzen, I., and Fishbein, M. (1974). Factors Influencing Intentions and the Intention-Behaviour Relation. Human Relations, 27, 1-15 .

Ajzen, I., and Fishbein, M. (1977). Attitude-Behaviour Relations: A Theoretical Analysis and Review of Empirical Research. Psychological Bulletin, 84, 888-918 .

Ajzen, I., and Fishbein, M. (1980). Understanding Attitudes and Predicting Social Behaviour. Englewood Cliffs, N.J.:Prentice-Hall.

Allen, V. L., and Wilder, D. A. (1975). Categorization, Belief Similarity and Intergroup Discrimination. Journal of Personality and Social Psychology, 32, 971-997 .

Allport, G. W. (1946). Some Roots of Prejudice. Journal of Personality and Social Psychology, 22, 9-39 .

Allport, G.W. (1954). The Nature of Prejudice. New York:Doubleday, Garden City.

Anslinger, H.J., and Tompkins, W.F. (1953). The Traffic in Narcotics. New York:Funk and Wagnells.

Ausabel, D.P. (1958). Drug Addiction: Physiological and Sociological Aspects. New York:Random House.

Bearden, W. O., and Woodside, A. B. (1977). Normative and Attitudinal Control as Moderating Influences on Marijuana use. Journal of Health and Social Behaviour, 18, 212-222 .

Beck, K. H., and Davies, C. M. (1980). Smoking Intentions in Adolescents: Direct Experience and Predictability. Social Behaviour and Personality, 8, 185-191 .

Bentler, P. M., and Speckart, G. (1979). Models of Attitude-Behaviour Relations. Psychological Review, 86, 452-464 .

Berger, P., and Luckman, T. (1967). The Social Construction of Reality. London:Allen Lane.

Biernackie, P.L. (1973). The Social Careers of Heroin Addicts. Final Report R01 DA 00280 Scientific Analysis Corporation.

Billig, M. (1973). Normative Communication in a Minimal Intergroup Situation. European Journal of Social Psychology, 3, 27-52 .

Billig, M., and Tajfel, H. (1973). Social Categorization and Similarity in Intergroup Behaviour. European Journal of Social Psychology, 3, 27-52 .

Bogazzi, R. P. (1981). An Examination of the Validity of Two Models of Attitude. Multivariate Behavioural Research, 16, 323-359 .

Borgida, E., and Nisbett, R. E. (1975). Attribution and the Psychology of Prediction. Journal of Personality and Social Psychology, 32, 932-943 .

Borgida, E., and Nisbett, R. E. (1977). The Differential Impact of Abstract vs Concrete Information on Decisions. Journal of Applied Social Psychology, 7, 258-271 .

Boris, S. (1979). Stereotypes and Dispositions for Criminal Homicide. Criminology, 17 (2), 139-158 .

Bowman, C. H., and Fishbein, M. (1978). Understanding Public Reaction to Energy Proposals: An Application of the Fishbein Model. Journal of Applied Social Psychology, 8, 319-340 .

Boyanowsky, E. O., and Allen, V. L. (1973). Ingroup Norms and Self-Identity as Determinants of Discriminatory Behaviour. Journal of Personality and Social Psychology, 25, 408-418 .

Brown, R. J., and Deschamps, J. C. (1981). Discrimination Between Individuals and Between Groups. Psychological Bulletin, 34, 185-195 .

Brown, R. J., and Turner, J. C. (1979). The Criss-Cross Categorization Effect in Intergroup Discrimination. British Journal of Social and Clinical Psychology, 18, 371-383 .

Bruner, J.S. (1958). Social Psychology and Perception. In Maccoby, E.E. / Newcomb, T.M. / Hartley, E.L. (Ed.) Readings in Social Psychology. New York :Holt Rinehart and Winston.

Bruner, J. S., and Goodman, C. C. (1947). Value and Need as Organizing Factors in Perception. Journal of Abnormal and Social Psychology, 42, 33-44 .

Bruner, J.S., Goodnow, J.J., and Austin, G.A. (1956). A Study of Thinking. New York:Wiley.

Bruner, J. S., and Perlmutter, H. V. (1957). Compatriot and Foreigner: A Study of Impression Formation in Three Countries. Journal of Abnormal and Social Psychology, 55, 253-260 .

Bruner, J. S., and Rodrigues, J. S. (1953). Some Determinants of Apparent Size. Journal of Abnormal and Social Psychology, 48, 585-592 .

Bynner, J.M. (1969). The Young Smoker. Government Social Survey Report. S. 383. HMSO.

Byrne, D., Barry, J., and Nelson, D. (1963). Relation of the Revised Repression-Sensitization Scale to Measures of Self-Description. Psychological Reports, 13, 323-334 .

Campbell, D. T. (1956). Enhancement of Contrast as a Composite Habit. Journal of Abnormal and Social Psychology, 53, 350-355 .

Campbell, D. T. (1958). Common Fate, Similarity and Other Indices of the Status of Aggregates of Persons as Social Entities. Behavioural Science, 3, 14-25 .

Campbell, D. T. (1967). Stereotypes and the Perception of Group Differences. American Psychologist, 22, 817-829 .

Campbell, R.J. (1962). Etiological and Personality Factors. In Bier, W.C. (Ed.) Problems in Addiction. New York:Fordham University Press.

Cantor, N., and Mischel, W. (1977). Traits as Prototypes: Effects on Recognition Memory. Journal of Personality and Social Psychology, 35, 38-40 .

Chapman, L. J. (1967). Illusory Correlations in Observational Reports. Journal of Psychology, 6, 151-155 .

Chapman, L. J., and Chapman, J. P. (1967). Genesis of Popular but Erroneous Pshchodiagnostic Observations. Journal of Abnormal Psychology, 72, 193-204 .

Chapman, L. J., and Chapman, J. P. (1969). Illusory Correlations as an Obstacle to the Use of Valid Psychodiagnostic Signs. Journal of Abnormal Psychology, 74, 271-280 .

Chu, G. C. (1966). Fear Arousal, Efficacy and Imminency. Journal of Personality and Social Psychology, 4, 517-524 .

Chung, J. (1982). Factors Influencing Young Women's Smoking Intentions and Behaviour. Journal of Applied Social Psychology, 10, 34-42 .

Chung, J., and Fishbein, M. (1979, (May)). Predicting Young Womens' Intentions to Smoke: Some Implications for Attitude Measurement. Paper Presented at Midwestern Psychological Association, Chicago

Cohen, A.R. (1957). Need for Cognition and Order of Communication as Determinants of Opinion Change. In Hovland, C.I. (Ed.) The Order of Presentation. New Haven:Yale University Press.

Cohen, J., Fishbein, M., and Antola, O. (1972). The Nature and Use of the Expectancy Value Models in Consumer Attitude Research. Journal of Marketing Research, 9, 456-460

Connor, W.D. (1972). Deviance in Soviet Society: Crime, Delinquency and Alcoholism. New York:Columbia University Press.

Cook, M. P., Lounsbury, J. W., and Fontenelle, G. A. (1980). An Application of Fishbein and Ajzen's Attitude-Subjective Norm Model to the Study of Drug Use. Journal of Social Psychology, 110, 193 .

Cook, M. P., and Speckart, G. (1979). Models of Attitude-Behaviour Relations. Psychological Review, 86, 452-464 .

Cooper, J., and Fazio, R.H. (1979). The Formation and Persistence of Attitudes that Support Intergroup Conflict. In Austin, W.G. / Worchel, S. (Ed.) The Social Psychology of Intergroup Relations. Monterey California:Brooks/Cole.

Dabbs, J. M., and Levanthal, H. (1966). Effects of Varying the Recommendations in a Fear-Arousing Communication. Journal of Personality and Social Psychology, 4, 525-531 .

Davidson, A. R., and Jaccard, J. J. (1975). Population Psychology: A New Look at an Old Problem. Journal of Personality and Social Psychology, 31, 1073-1082 .

Davidson, S. R. (1962). Relevance and Category Scales of Judgement. British Journal of Psychology, 53, 373-380 .

Davies, J. B. (1979). Reported Alcohol Consumption, and Attitudes of Managerial and Non-Managerial Employees, in a Study of Five Industries on Clydeside. British Journal on Alcoholism, 13, 160-169 .

Davies, J. B. (1986). Unsolved Problems With Mass Media Drug Education Campaigns: Three Cautionary Tales. Health Education Research: Theory and Practice, 1, 69-74 .

Davies, J.B., and Stacey, B. (1972). Teenagers and Alcohol: A Developmental Study in Glasgow. HMSO.

Degan, E. T. (1972). An Exploration Into the Relationship Between Depression and Positive Attitude Towards Drugs in Young Adolescents and an Evaluation of a Drug Education Program. Dissertation Abstracts, 32 (11-B), 6614-6615 .

Dembroski, T. M., Lasater, T. M., and Ramirez, A. (1978). Communication, Similarity, Fear-Arousing Communication and Compliance with Health Care Recommendations. Journal of Applied Social Psychology, 8, 254-269 .

DeVries, D. C., and Ajzen, I. (1971). The Relationship of Attitudes and Normative Beliefs to Cheating in College. Journal of Social Psychology, 83, 199-207 .

Dion, K. L., Earn, B. M., and Yee, P. H. N. (1978). The Experience of Being a Victim of Prejudice: An Experimental Approach. International Journal Of Psychology, 13, 197-214 .

Doctor, R. M., and Sieving, N. A. (1973). A Comparison of Attitudes Among Heroin Addicts, Policemen, Marijuana Users, and Non-Drug Users About the Drug Addict. The International Journal of the Addictions, 8 (4), 691-699 .

Doise, W. (1976). L'Articulation Psychosociologique et les Relations entre Groupes. Brussels:De Boeck.

Doise, W. (1978). Groups and Individuals. Cambridge:Cambridge Univeristy Press.

Doise, W., and Weinberger, M. (1973). Representations Masculine Dans Differentes Situations de Recontres Mixtes. Bulletin de Psychologie, 26, 649-657 .

Dole, V. P., and Nyswander, M. E. (1967). Addiction: A Metabolic Disease. Archives of International Medicine, 120, 19-24 .

Dorn, N. (1981). Social Analysis of Drugs in Health Education and the Media. In Edwards, G. / Busch, C. (Ed.) Drug Problems in Britain. London:Academic Press.

Downs, W. R. (1987). A Panel Study of Normative Structure, Adolescent Alcohol Use and Peer Alcohol Use. Journal of Studies on Alcohol, 48 (2), 167-174 .

Dulany, D.E. (1968). Awareness, Rules, and Propositional Control: A Confrontation with S-R Behaviour Theory. In Horton, D. / Dixon, T. (Ed.) Verbal Behaviour and S-R Behaviour Theory. New York:Prentice-Hall.

Duncan, B. L. (1976). Differential Social Perception and Attribution of Intergroup Violence: Testing the Lower Limits of Stereotyping of Blacks. Journal of Personality and Social Psychology, 34 (4), 590-598 .

Dupont, R. L., and Katon, R. N. (1971). Development of a Heroin Addiction Treatment Program: Effect on Urban Crime. Journal of the American Medical Association, 216, 1320-1324 .

Dziokonski, W., and Waber, S. T. (1977). Repression-Sensitization, Perceived Vulnerability, and the Fear Appeal Communication. Journal of Social Psychology, 102, 105-112 .

Ehrlich, H.J. (1973). The Social Psychology of Prejudice. New York:Wiley.

Eiser, J.R., and Stroebe, W. (1972). Categorization and Social Judgement. European Monographs, No. 3 Academic Press.

Eiser, J. R., Van der Plight, T., and Mossop, M. R. (1979). Categorization, Attitude, and Memory for the Source of Attitude Statements. European Journal of Social Psychology, 9, 243-251 .

Eiser, R.J. (1979). Cognitive Social Psychology. London:McGraw-Hill.

Emswiller, R., Deaux, K., and Willits, J. (1971). Similarity, Sex, and Requests for Small Favours. Journal of Applied Social Psychology, 1, 284-291 .

Erikson, K.T. (1966). Wayward Puritans: A Study of Sociological Deviance. New York:Wiley.

Festinger, L., Pepitone, A., and Newcomb, T. (1952). Some Consequences of Deindividuation in a Group. Journal of Abnormal and Social Psychology, 47, 382-389 .

Feyerabend, P. (1965). Problems of Empiricism. In Colondy, R.G. (Ed.) Beyond the Edge of Certainty. Englewood Cliffs N.J.:Prentice-Hall.

Fishbein, M. (1963). An Investigation of the Relationships Between Beliefs About an Object and the Attitude Toward that Object. Human Relations, 16, 233-240 .

Fishbein, M. (1966). Sexual Behaviour and Propositional Control. Paper Presented at the Meeting of the Psychonomic Society

Fishbein, M. (1980). A Theory of Reasoned Action: Some Applications and Implications. In Howe, H. / Page, M. (Ed.) Nebraska Symposium and Behaviour: An Introduction to Theory and Research. Boston:Addison-Wesley.

Fishbein, M. (1982). Social Psychological Analysis of Smoking Behaviour. In J.R.Eiser (Ed.) Social Psychology and Behavioural Medicine. London:Wiley.

Fishbein, M., and Ajzen, I. (1975). Belief, Attitude, Intention and Behaviour: An Introduction to Theory and Research. Reading Massy:Addison-Wesley.

Fishbein, M., and Ajzen, I. (1981). Acceptance, Yielding and Impact: Cognitive Processes in Persuasion. In Petty, R.E. / Ostrom, T.M. / Brock. T.C. (Ed.) Cognitive Responses in Persuasion. Hillsdale, N.J.:Erlbaum.

Fishbein, M., and Coombs, F. S. (1974). Basis for Decision: An Attitudinal Analysis of Voting Behaviour. Journal of Applied Social Psychology, 4, 95-124 .

Fishbein, M., and Feldman, S. (1963). Social Psychological Studies in Voting Behaviour, 1: Theoretical and Methodological Considerations. American Psychologist, 18, 388-399 .

Golding, S. L., and Rorer, L. G. (1972). Illusory Correlations and the Incomplete Sentence Blank. Journal of Abnormal Psychology, 80, 249-260 .

Goldstein, M. J. (1959). The Relationship Between Coping and Avoiding Behaviour and Response to Fear Arousing Propaganda. Journal of Abnormal and Social Psychology, 58, 247-252 .

Goodwin, L. (1971). On Making Research Relevant to Public Policy and National Problem Solving. American Psychologist, 26, 431-442 .

Gossop, M. (1982). Living with Drugs. London:Temple Smith.

Gossop, M., Eiser, R. J., and Ward, E. (1982). The Addicts' Perceptions of Their Own Drug-Taking: Implications for the Treatment of Drug Dependence. Addictive Behaviours, 7, 189-194 .

Griffith, R. W., and Rogers, R. W. (1976). Effects of Fear Arousing Components of Driver Education on Students' Safety Attitudes and Simulator Performance. Journal of Education Psychology, 68, 501-506 .

Hamilton, D. L., and Gifford, R. K. (1976). Illusory Correlations and Interpersonal Perceptions. Journal of Experimental Social Psychology, 12, 392-407 .

Hanson, N.R. (1965). Patterns of Discovery. New York:Cambridge University Press.

Harman, H.H. (1967). Modern Factor Analysis. Chicago:University of Chicago Press.

Harris, A. J. (1977). Sex and Theories of Deviance: Toward a Functional Theory of Deviant Type-Scripts. American Social Review, 42, 3-16 .

Hawks, D. (1974). The Epidemiology of Narcotic Addiction in the United Kingdom. In Josephson, E. / Carroll, E.E. (Ed.) Drug Use: Epidemiological and Sociological Approaches. New York:Wiley.

Helmer, J. (1974). The Deadly Simple Mechanics of Society. New York:Seabury.

Home Office (1986). Tackling Drug Misuse: A Summary of the Government's Strategy. Second Edition. Home Office.

Hovland, C.I., Janis, I.L., and Kelly, H.H. (1953). Communication and Persuasion. New Haven Connecticut:Yale University Press.

Howard, J. W., and Rothcart, M. (1980). Social Catergories and Memory for In-Group and Out-Group Behaviour. Journal of Personality and Social Psychology, 38, 301-310 .

Hoy, R. M. (1977). Some Findings Concerning Beliefs About Alcoholism. British Journal of Medical Psychology, 50, 227-235 .

Jaccard, J. J. (1975). A Theoretical Ananysis of Selected Factors Important to Health Education Strategies. Health Education Monographs, 3, 152-167 .

Jaccard, J. J., and Davidson, A. R. (1972). Toward Understanding of Family Planning Behaviours: An Initial Investigation. Journal of Applied Social Psychology, 2, 228-235 .

Jaccard, J. J., and Fishbein, M. (1975). Inferential Beliefs and Order Effects in Personality Impression Formation. Journal of Personality and Social Psychology, 31, 1031-1040 .

Jahoda, G., and Cramond, J. (1972). Children and Alcohol. 1 HMSO.

Janis, I.L. (1967). Effects of Fear Arousal on Attitude Change: Recent Developments in Theory and Experimental Research. In Berkowitz, L (Ed.) Advances in Experimental Social Psychology (Vol 3). New York:Academic Press.

Janis, I.L. (1968a ). The Contours of Fear. New York:Wiley.

Janis, I. L. (1968b ). When Fear is Healthy. Psychology Today, 1 (11), 46-49, 60-61 .

Janis, I. L., and Feshbach, S. (1953). Personality Difference Associated with Responsiveness to Fear-Arousing Communications. Journal of Personality, 48, 78-92 .

Janis, I. L., and Feshbach, S. (1953). Effects of Fear-Arousing Communication. Journal of Abnormal and Social Psychology, 48, 78-92 .

Jellineck, E.M. (1960). The Disease Concept of Alcoholism. New Haven:Hillhouse Press.

Jorgenson, D. O., and Dukes, F. O. (1976). Deindividuation as a Function of Density and Group Membership. Journal of Personality and Social Psychology, 34, 24-29 .

Joseph, H., and Dole, V. P. (1970). Methadone Patients on Probation and Parole. F.E.D. Probation, 34, 42-55 .

Kahneman, D., Slovic, P., and Tversky, A. (1982). Judgement Under Uncertainty. Hueristics and Biases. Cambridge: University Press.

Kandel, D.B. (1978). Convergences in Prospective Longitudinal Surveys of Drug Use in Normal Populations. In Kandel, D.B. (Ed.) Longitudinal Research on Drug Use: Empirical Findings and Methodological Issues. Washington D.C:Hemisphere Publishing.

Kandel, D.B., Kessler, R.C., and Marguiles, R.Z. (1978). Antecedents of Adolescent Initiation into Stages of Drug Use: A Developmental Analysis. In Kandel, D.B. (Ed.) Longitudinal Research on Drug Use: An Empirical Finding and Methodological Issues. New York:Halsted.

Kelly, G.A. (1955). A Theory of Personality. New York:Norton.

Kinder, B. N. (1975a ). Attitudes Towards Alcohol and Drug Abuse, 1: Demographic and Correlational Data. The International Journal of the Addictions, 10 (5), 737-760 .

Kinder, B. N. (1975b ). Attitudes Towards Alcohol and Drug Abuse, 11: Experimental Data, Mass Media Research and Methodological Considerations. The International Journal of the Addictions, 10 (5), 1035-1054 .

Kinder, B. N., Pape, N. E., and Walfish, S. (1980). Drug and Alcohol Education Programs: A Review of Outcome Studies . The International Journal of the Addictions, 15 (7), 1035-1054 .

Kirtz, J. P., Becker, M. H., Heafner, D. P., and Maiman, L. A. (1978). Effects of Threatenting Communications and Mothers' Health Beliefs on Weight Change in Obese Children. Journal of Behavioural Medicine, 1, 147-157 .

Kitsue, J. (1962). Societal Reaction to Deviant Behaviours. Social Problems, 9, 247-256 .

Knox, W. (1971). Attitudes of Psychiatrists and Psychologists Towards Alcoholism. American Journal of Psychiatry, 127, 1675-1679 .

Larson, P.S., and Silvette, H. (1968). Tobacco. Experimental and Clinical Studies Supplement 1. Williams and Wilking.

Laskowitz, D. (1965). Psychological Characterisitcs of the Adolescent Addict. In Harris, E (Ed.) Drug Addiction in Youth. Oxford:Pergamon Press.

Lauer, R. H. (1971). The Middle Class Looks at Poverty. Urban and Social Change Review, 5, 8-10 .

Lent, R. H. (1970). Binocular Resolution and Perception of Race in the United States. British Journal of Psychology, 61, 521-533 .

Leventhal, H. (1970). Findings and Theory in the Study of Fear Communications. In Berkowitz, L. (Ed.) Advances in Experimental Social Psychology Vol 5. New York:Academic Press.

Leventhal, H., Jones, S., and Trembly, G. (1966). Sex Differences in Attitude and Behaviour Change Under Conditions of Fear and Specific Instructions. Journal of Personality and Social Psychology, 2, 387-399 .

Leventhal, H., Singer, P. R., and Jones, S. (1965). Effects of Fear and Specificity of Recommendation Upon Attitudes and Behaviour. Journal of Personality and Social Psychology, 2, 20-29 .

Leventhal, H., and Singer, R. P. (1966). Affect Arousal and Positioning of Recommendations in Persuasive Communication. Journal of Personality and Social Psychology, 4, 137-146 .

Leventhal, H., and Watts, J. (1966). Sources of Resistance to Fear-Arousing Communications on Smoking and Lung Cancer. Journal of Personality and Social Psychology, 6, 313-321 .

Leventhal, H., Watts, J., and Pagano, F. (1967). Effects of Fear and Instruction on How to Cope with Danger. Journal of Personality and Social Psychology, 6, 313-321 .

Leventhan, H., and Trembly, G. (1968). Negative Emotions and Persuasion. Journal of Personality, 36, 154-168 .

Levitt, L. I., Baganz, P., and Blachy, P. H. (1963). A Study of Employees' Attitudes Towards Patients in a Hospital for the Treatment of Drug Addiction. The Psychiatric Quarterly, 37, 210-219 .

Ley, P., Bredshaw, P.W., Kinlet, J., Couper-Smartt, J., and Wilson, M. (1974). Psychological Variables in the Control of Obesity . In Burland, W.D. / Samuel, P.D. / Yudkin, P. (Ed.) Obesity Symposium. London:Churchill, Livingstone.

Lilli, W. (1970). Das Zustande Kommen Von Stereotypen Uber Einfache und Complexe Sachverhalte. Zeitschrift fur Socialpsychologie, 1, 57-59 .

Lindesmith, A.R. (1968). Addiction and Opiates. Chicago:Aldine.

Lipperman, W. (1922). Public Opinion. New York:Macmillan.

Locksley, A., Hepburn, C., and Ortiz, V. (1982). On the Effect of Social Stereotypes on Judgements of Individuals: A Comment on Grant and Holme's "The Integration of Implicit Personality Theory Schemas and Stereotype Images. Social Psychology Quarterly, 45, 270-273 .

Lukoff, I.F. (1974). Issues in the Evaluation of Heroin Treatment. In Josephson, E. / Carroll, E.E. (Ed.) Drug Use: Epidemilogical and Sociological Approaches____. New York:Wiley.

Lutz, B. (1975). Changing Brand Attitudes Through Modification of Cognitive Structure. Journal of Consummer Research, 1, 49-59 .

Mannheim, K. (1966). Ideology and Utopia. New York:Brace and World.

Manstead, A.S.R., Proffitt, C., and Smart, J.L. (1981). Predicting Mothers' Choice of Infant Feeding Methods. Unpublished Manuscript, University of Manchester

Manstead, A. S. R., Proffitt, C., and Smart, J. L. (1983). Predicting and Understanding Mothers' Infant-Feeding Behaviour: Testing the Theory of Reasoned Action. Journal of Personality and Social Psychology, 44 (4), 657-671 .

Maslash, L. (1974). Social and Personal Bases of Individuation. Journal of Personality and Social Psychology, 29, 411-425 .

Mason, M.L. (1973). Drug Education Effects. Dissertation Abstracts 34 (4-B). :

McArdle, J.B. (1972). Positive and Negative Communications and Subsequent Attitude and Behaviour Change in Alcoholics. Unpublished Doctoral Dissertation, University of Illinois. :

McCarty, D. (1978). Attitudinal and Normative Influence on Contraceptive Usage Intentions: A Test of the Fishbein Model of Intention. Dissertation Abstracts. :

McCarty, D. (1981). Changing Contraceptive Usage Intentions: A Test of the Fishbein Model of Intention. Journal of Applied Social Psychology, 11 (3), 192-211 .

McGuire, W.J. (1960). A Syllogistic Ananysis of Cognitive Relationships. In Hovland, C.I. / Rosenberg, M.J. (Ed.) Attitude Organization and Change. New Haven:Yale University Press.

McGuire, W. J. (1963). Effectiveness of Fear Appeals in Advertising. New York Advertising Research Foundation, 55-62 .

McGuire, W. J. (1966). Attitudes and Opinions. Annual Review of Psychology, 17, 475-514 .

McGuire, W.J. (1968a). Personality and Attitude Change: An Information-Processing Theory. In Greenwald, A.G. / Brock, T.C. / Ostrom, T.M. (Ed.) Psychological Foundations of Attitudes. New York:Academic Press.

McGuire, W.J. (1968b). Personality and Susceptibility to Social Influence. In Borgatta, E.F. / Lambert, W. (Ed.) Handbook of Personality Theory and Research. Chicago:Rand McNally.

McGuire, W. J., and Padawer-Singer, A. (1976). Trait Salience in the Spontaneous Self-Concept. Journal of Personality and Social Psychology, 33, 101-134 .

McHugh, M., Beckman, L., and Frieze, I. (1980). Analysing Alcoholism. In Frieze, I. / Bar-Tel, J. / Carroll, J. (Ed.) New Approaches to Social Problems. San Francisco C.A.:Jossey-Bass.

McKennell, A. C., and Bynner, J. M. (1969). Self Images and Smoking Behaviour Among School Boys. British Journal of Educational Psychology, 39, 27-39 .

Mewborn, C. R., and Rogers, R. W. (1979). Effects of Threatening and Reassuring Components of Fear Appeals on Physiological and Verbal Measures of Emotion and Attitudes. Journal of Experimental Social Psychology, 15, 242-253 .

Miller, G. R., and Hewgill, M. A. (1966). Some Recent Research on Fear-Arousing Message Appeals. Speech Monographs, 33, 377-391 .

Miller, N.E. (1951). Learnable Drives and Rewards. In Stevens, S.S. (Ed.) Handbook of Experimental Psychology. New York:Wiley.

Millgram, S. (1974). Some Conditions and Personal Bases of Individuation . Journal of Personality and Social Psychology, 29, 411-425 .

Millman, S. (1968). Anxiety, Comprehension and Susceptibility to Social Influence. Journal of Personality and Social Psychology, 50, 2-15 .

Minard, R. D. (1952). Race Relationships in the Pocahontas Coal Fields. Journal of Social Issues, 25, 29-44 .

Ministry of Health (1974). Report of a Joint Committee of the Central and Scottish Services Councils on Health Education. HMSO.

Miren, S. R., Meyer, R. E., and McNamee, B. (1976). Psychopathology and Mood Duration Heroin Use: Acute and Chronic Effects. Archives of General Psychiatry, 33, 1503-1508 .

Mitchell, T. R. (1974). Expectancy Models of Job Satisfaction, Occupational Preference, and Effort: A Methodoligical and Empirical Appraisal. Psychological Bulletin, 81, 809-826 .

Moltz, H., and Thistlethwaite, D. L. (1955). Attitude Modification on Anxiety Reduction. Journal of Abnormal and Social Psychology, 50, 231-237 .

Movahedi, S. (1976). Methodological Schizophrenia: A Problem in the Sociology of Science. International Journal of Contemporary Sociology, 13, 79-92 .

Niles, P. (1964). The Relationshiup of Susceptibility and Anxiety to Acceptance of Fear Arousing Communications. Unpublished Doctoral Dissertation. :

Nisbett, R., and Borgida, E. (1975). Attributions and the Psychology of Prediction. Journal of Personality and Social Psychology, 32, 932-943 .

Norland, S., and Shover, N. (1977). Gender Roles and Female Criminality: Some Critical Comments. Criminology, 15, 87-104 .

O'Rourke, T. W., and Barr, S. L. (1974). Assessment of the Effectiveness of the New York State Drug Curriculum Guide with Respect to Drug Attitudes. Journal of Drug Education, 4, 347-356 .

Osgood, C.E., Suci, G., and Tannenbaum, P. (1957). The Measurement of Meaning. Urbana:University of Illinois.

Pettigrew, T. F., Allport, G. W., and Barnett, E. V. (1958). Binocular Resolution and Perception of Race in South Africa. British Journal Of Psychology, 49, 265-278 .

Pomazal, R. (1980). College Enrollment Motivation: A Theoretical Marketing Approach. Journal of College Student Population, 21, 126-134 .

Pomazal, R. (1983). Salient Beliefs and Attitude Change Over Time: An Experimental Approach. Representative Research in Social Psychology, 13, 11-22 .

Pomazal, R. J., and Brown, J. D. (1977). Understanding Drug Use Motivation: A New Look at a Current Problem. Journal of Health and Social Behaviour, 18, 212-222 .

Pomazal, R. J., and Jaccard, J. J. (1976). An Informational Approach to Altruistic Behaviour: Look to the Method of Attitude Formation. Journal of Experimental Psychology, 33, 317-326 .

Ramiriz, A., and Lasater, T. M. (1977). Ethnicity of Communicator, Self-Esteem and Reactions to Fear Arousing Communications. Journal of Social Psychology, 102, 79-91 .

Regan, D. T., Straus, E., and Fazio, R. (1974). Liking and the Attribution Process . Journal of Experimental Social Psychology, 10, 385-397 .

Rex, J. (1969). Race as a Social Category. Journal of Biosocial Science, 1, 145-152 .

Richardson, D. W., Nadar, P. R., Rochman, J. C., and Friedman, S. B. (1972). Attitudes of Fifth Grade Students to Illicit Psychoactive Drugs. Journal of School Health, 42, 389-391 .

Rivers, P., Sarata, B., and Book, T. (1974). Effect of an Alcoholism Workshop on Attitudes, Job Satisfaction and Job Performance of Secretaries. Quarterly Journal of Studies in Alcohol, 35, 1382-1388 .

Roberts, S. (1979). Beliefs Associated with Smoking Intentions of College Women. Doctoral Dissertation. Urbana-Champaign:University of Illinois.

Rogers, R. W., and Deckner, C. W. (1975). Effects of Fear Appeals and Physiological Arousal Upon Emotions, Attitudes and Cigarette Smoking. Journal of Personality and Social Psychology, 32, 222-230 .

Rogers, R. W., and Mewborn, C. R. (1976). Fear Appeals and Attitude Change: Effects of a Threat's Noxiousness, Probalility of Occurrence and the Efficacy of Coping Responses. Journal of Personality and Social Psychology, 34, 54-61 .

Rogers, R. W., and Thistlethwaite, D. L. (1970). Effects of Fear Arousal and Reassurance Upon Attitude Change. Journal of Personality and Social Psychology, 15, 227-233 .

Rokeach, M. (1970). The Measurement of Values and Value Systems. In Abcarian, G. (Ed.) Political Participation and Social-Psychological Processes. Colombus Ohio:Merrill.

Rokeach, M. (1973). The Nature of Human Values. New York:Free Press.

Romney, D., and Bynner, J. (1972). Drug Addicts as Perceived by Hospital Staff. British Journal of Social and Clinical Psychology, 11, 20-34 .

Rosch, E., Mervis, C. B., Gray, W. D., Johnson, D. M., and Boyes-Bream, P. (1975). Basic Objects in Natural Categories. Cognitive Psychology, 7, 573-605 .

Rosenblitt, D. L., and Nagey, D. A. (1973). The Use of Medical Manpower in the Seventh Grade Drug Education Program. Journal of Drug Education, 3, 39-56 .

Rothbart, M., Evans, M., and Fulero, S. (1979). Recall for Confirming Events: Memory Processes and the Maintenance of Social Stereotypes. Journal of Experimental Social Psychology, 15, 343-355 .

Sagar, H. A., and Schofield, J. W. (1980). Racial and Behavioural Cues in Black and White Children's Perceptions of Ambigiously Aggressive Acts. Journal of Personality and Social Psychology, 39, 590-598 .

Scheffe, T.J. (1966). Being Mentally Ill. Chicago:Aldine.

Schuman, S., Caffrey, E., and Hughes, P. (1970). Residential Stability of Narcotic Addicts: Implications for Treatment Planning. APA Proceedings, 5, 797-798 .

Schur, E.M. (1971). Labelling Deviant Behaviour: Its Sociological Implications. New York:Harper and Row.

Scott, R.A. (1969). The Making of a Blind Man. New York:Russell Sage.

Secord, P.F., and Backman, C.W. (1964). Social Psychology. New York:McGraw-Hill.

Shegal, R. P., Crawford, C. A., and Sanborn, M. D. (1977). Correspondence and Mediational Properties of the Fishbein Model: An Application to Adolescent Alcohol Use. Journal of Experimental Social Psychology, 13, 421-430 .

Sherif, M. (1967). Group Conflict and Co-Operation. London:Routledge and Kegan Paul.

Simmons, J. L. (1965). Public Stereotypes of Deviants. Social Problems, 13, 225 .

Singer, R.P. (1965). The Effects of Fear-Arousing Communications. Unpublished Doctoral Dissertation. Connecticut:University of Connecticut.

Skilbeck, C., Tulips, J., and Ley, P. (1977). The Effects of Fear Arousal, Fear Position, Fear Exposure, and the Sidedness with Dietary Instructions. European Journal of Social Psychology, 7, 221-239 .

Snyder, M., and Gangestad, S. (1981). Hypothesis-Testing Processes. In Harvey, J.H. / Ickes, W.J. / Kidd, R.F. (Ed.) New Directions in Attribution Research (Vol 3). Hillspace:H.J. Erlbaum.

Snyder, M., and Swann, W. B. J. (1978). Hypothesis-Testing Processes in Social Interaction. Journal of Personality and Social Psychology, 36, 1202-1212 .

Starr, B.J., and Katkin, E.S. (1969). The Clinician as an Aberrant Actuary: Illusory Correlations and the Incomplete Sentences Blank. New York:Free Press.

Stenmark, D., Kinder, B. N., and Milne, L. (1977). Drug Related Attitudes and Knowledge of Pharmacy Students and College Undergraduates. The International Journal of the Addictions, 12, 153-160 .

Stoll, C. S. (1968). Images of Man and Social Control. Social Forces, 47, 119-127 .

Street, L. (1953). I Was A Drug Addict. New York:Wiley.

Sutton, R.S. (1982). Fear-Arousing Communications: A Critical Examination of Theory and Research. In Eiser, R.J. (Ed.) Social Psychology and Behaviour Medicine. New York:Wiley.

Sutton, S.R. (1979). Can Subjective Expected Utility (SEU) Theory Explain Smokers' Decisions to Try to Stop Smoking?. In Oborne, D.J. / Gruneberg, M.M. / Eiser, J.R. (Ed.) Research in Psychology and Medicine. London:Academic Press.

Szasz, T. (1961). The Myth of Mental Illness: Foundations of a Theory of Personal Conduct. New York:Hoeber-Harper.

Szasz, T. (1970). The Manufacture of Madness: A Comparative Study of the Inquisition and the Mental Health Movement. New York:Harper and Row.

Szasz, T. (1974). Ceremonial Chemistry. New York:Doubleday.

Tajfel, H. (1957). Value and the Perceptual Judgement of Magnitude. Psychological Review, 64, 192-204 .

Tajfel, H. (1959). Quantitative Judgement in Social Perception. British Journal of Psychology, 50, 16-29 .

Tajfel, H. (1962). Social Perception. In Humphrey, G. / Argylle, E. (Ed.) Social Psychology Through Experiment. London:Methuen.

Tajfel, H. (1963). Stereotypes. Race, 5, 3-14 .

Tajfel, H. (1969). Social and Cultural Factors in Perception. In Lindzey, G. /Aronson, E. (Ed.) Handbook of Social Psychology. Reading Mass:Addison-Wesley.

Tajfel, H. (1978a). The Structure of Our Views about Society. In Tajfel, H. / Fraser, C. (Ed.) Introductory Psychology. Harmondsworth:Penguin Books.

Tajfel, H. (1978b ). Differentiation Between Social Groups: Studies in the Social Psychology of Intergroup Relations. London:Academic Press.

Tajfel, H. (1979). Individuals and Groups in Social Psychology. British Journal of Social and Clinical Psychology, 18, 183-190 .

Tajfel, H. (1981). Social Stereotypes and Social Groups. In Turner, J.C. / Giles, H. (Ed.) Intergroup Behaviour. Oxford:Basil-Blackwell.

Tajfel, H., and Billig, M. (1974). Familiarity and Categorization in Intergroup Behaviour. Journal of Experimental Social Psychology, 10, 159-170 .

Tajfel, H., Sheik, A. A., and Gardner, R. C. (1064). Contents of Stereotypes and the Inference of Similarity Between Members of Stereotyped Groups. Acta Psychologica, 22, 191-201 .

Tajfel, H., and Turner, J.C. (1979). An Integrative Theory of Intergroup Conflict. In Austin, W.G. / Worchel, S. (Ed.) The Social Psychology of Intergroup Relations. Monterey, California:Brooks/Cole.

Tajfel, H., and Wilkes, A. L. (1963). Classification and Quantitative Judgement. British Journal of Psychology, 54, 101-114 .

Taylor, S. E., Fiske, S. T., Etcoff, N. L., and Ruderman, A. (1978). Categorical and Contextual Bases of Personal Memory and Stereotyping. Journal of Personality and Social Psychology, 36, 773-793 .

The President's Commission on Law Enforcement and Administration of Justice (1967). Task Force Report: Narcotic and Drug Abuse. US Government Printing Office.

The Presisent's Commission on Law Enforcement and Administration of Justice (1967). Task Force Report: Narcotic and Drug Abuse. Government Printing Office.

The Scottish Health Services Council (1974). Report of a Joint Committee of the Central and Scottish Health Services on Health. HMSO.

Tones, K. (1981). The Use and Abuse of the Mass Media in Health Promotion. In Leathar, D.S. / Hastings, G.B. / Davies, R.J.K. (Ed.) Health Education and the Media. Oxford:Pergamon Press.

Tones, K., and Davidson. L.. (1979). Health Education in the National Health Service. In Anderson, D.C. (Ed.) Health Education in Practice. London:Croom Helm.

Townsend, M. J. (1975). Cultural Conceptions, Mental Disorders, and Social Roles: A Comparison of Germany and America. American Social Review, 40, 739-752 .

Turner, J.C. (1978a). Social Categorization and Social Discrimination in the Minimal Group Paradigm. In Tajfel, H. (Ed.) Studies in the Social Psychology of Intergroup Relations. London:Academic Press.

Turner, J.C. (1982). Towards a Cognitive Redefinition of the Social Group. In Tajfel, H. (Ed.) Social Identity and Intergroup Relations. Cambridge: Cambridge University Press.

Turner, J.C. (1987). Rediscovering the Social Group: A Self-Categorization Theory. Oxford:Basil Blackwell.

US, D.f.H.E.n.W. (1964). Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service. US Government Printing Office.

Vinocour-Kaplan, D. (1978). To Have - Or Not to Have - Another Child: Family Planning Attitudes, Intentions and Behaviour. Journal of Applied Social Psychology, 8, 29-46 .

Warr, P. B., and Haycock, V. (1970). Scales for a British Personality Differential. British Journal of Social and Clinical Psychology, 9, 328-337 .

Weir, W. R. (1968). A Program of Alcohol Education and Counseling for High School Students With and Without a Family Alcohol Problem. Dissertation Abstracts, 28 (11-A), 4454-4455 .

Werner, P. D., Middlestadt, S. E., and Crawford, T. (1975). Having a Third Child: Predicting Behavioural Intentions. Journal of Marriage and the Family, 37, 548-586 .

White, M. J. (1977). Counter-Normative Behaviour as Influenced by De-Individualizing Conditions and Reference Group Salience. Journal of Social Psychology, 103, 75-90 .

Wilder, D. A. (1978). Reduction of Intergroup Discrimination through Individuation of the Outgroup. Journal of Personality and Social Psychology, 36, 1361-1374 .

Wilder, D. A. (1978). Reduction of Intergroup Discrimination Through Individuation of the Out-Group. Journal of Personality and Social Psychology, 36 (12), 1361-1374

Wilson, W., and Kayatani, M. (1968). Intergroup Attitudes and Strategies in Games Between Opponents of the Same or of a Different Race. Journal of Personality and Social Psychology, 9, 24-30 .

Woody, G.E., and Blaine, J. (1979). Depression in Narcotic Addicts: Quite Possibly More than a Chance Association.. In Dupont, R.L. / Goldstein, A. / O'Donnell, J. (Ed.) Handbook on Drug Abuse. Washington DC, NIDA :Government Printing Office.

Worchel, S., and Andreoli, V. A. (1978). Facilitation of Social Interaction Through Deindividuation of the Target. Journal of Personality and Social Psychology, 36, 549-556 .

World Health Organisation (1954). World Health Organisation Technical Report Series. 89

World Health Organisation (1958). World Health Organisation Technical Report Series. 156

World Health Organisation (1964). World Health Organisation Technical Report Series. 278

World Health Organisation (1964). World Health Organisation Technical Report Series. 278

World Health Organisation (1969). World Health Organisation Technical Report Series. 409

World Health Organisation (1969). World Health Organisation Technical Report Series. 432

World Health Organisation (1977). World Health Organisation Regional Office for Europe. ICP/HED 003

World Health Organisation (1979). World Health Organisation Regional Office for Europe Euro Reports and Studies. 11

Wyer, R.S. (1974). Cognitive Organization and Change. Potomac, Maryland:Lawrence Erlbaum.

Yaffe, Y., and Yinon, Y. (1979). Retaliatory Aggression in Individuals and Groups. European Journal of Social Psychology, 9, 177-186 .

Zimbardo, P.G. (1970). The Human Choice: Individuation, Reason, and Order vs Deindividuation, Impulse, and Chaos. In Arnold, W.J. / Levine, D. (Ed.) Nebraska Symposium on Motivation (Vol 17). Lincoln:University of Nebraska Press.

Zinberg, N. E. (1975). Addiction and Ego Function. Psychoanalytic Study of the Child, 30, 567-588 .