AN EXPERIMENTAL EVALUATION

OF

CRISIS INTERVENTION

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This thesis is my own work and sources used have been acknowledged.

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ABSTRACT

The concepts of crisis and crisis intervention are introduced and placed in the context of the developing community mental health movement. The concept of crisis and the associated theory are then critically reviewed in relation to their history and to other theories of adjustment. The application of crisis theory to intervention is then considered and critically compared to more traditional forms of intervention. Throughout this material careful attention is paid to representative empirical studies which provided impetus to the development of a distinctive crisis-oriented approach. This review demonstrated that the approach shows promise of meeting the need throughout the mental health field for a brief widely applicable form of intervention with a high level of impact, useable by a wide variety of care givers. The research problem chosen for investigation is defined as testing the promise of crisis intervention in relation to some specific at risk group. Literature reporting evaluations of crisis intervention is remarkably sparse.

A specific study comparing two levels of intervention with a no-intervention control is then described. The crisis event chosen was hospital treatment for road trauma. This is an instance of an accidental or unanticipated crisis.

Results reported demonstrate that the experience was a crisis of some severity. Further, brief crisis intervention in which a social worker dealt with emotional, practical and social problems created by the event both for the subject and his social network is shown to overcome the severe disruptions evident at follow-up in a no-intervention control group.

Some methodological and substantive problems in establishing clear conclusions are then examined and it is shown that the quality of social support received by subjects is a major factor mediating outcome.

Finally, practical implications and directions for further research are presented. In conclusion, the need for further evaluative research to test the many suggestions in the literature is stressed.

CHAPTER I: INTRODUCTION

Human beings have encountered psychological and physical health problems since ancient times. We have learned to cope with them by devising various forms of healing practices. At the same time as improvements have been made in health care, the general standards of living, in public health protection and in medical science there has been a parallel increase of practices which in modern terminology may be broadly conceived of as psycho-therapeutic variations concerning mental well-being.

As medical research has provided cures and preventive measures which have reduced the contribution of disease to loss of life and health, by comparison the progress in the field of mental health seems to be operating on the principle of diminishing returns.

One does not require the forsight of Alvin Toffler to produce a convincing argument for the possibility of a new psychiatric malady called "future shock" caused by man's inability to keep up with increasingly rapid pace of change. The patterns of psycho-social disorder are changing and are functions of changing economic, social and technological trends. Schizophrenia and the neuroses look pale in magnitude and treatment when compared with social concerns such as violence, drug abuse, the sexual revolution, alcoholism and other signs of social disorganisation to mention but the major ones.

More than ever, now we have to look at illness and mental health as a result of inter-relationship between social, environmental, biological and behavioural factors. In order to predict some of such "problem-in-living" concerns and make preparations to cope adequately with them, mental health workers must change their perspectives on what constitutes "public health" and respond to an overall increase in the need for health promotion and rehabilitation for all age groups. To do that we must develop new skills ourselves and consider alternative types of health manpower in direct patient care. A community mental health approach that makes its living dealing only with the casualties of social system will soon lose its validity. The new approach should be pro-active rather than reactive, adhering to a fundamental tenet of public health that no condition is ever prevented by treating the victims of the condition itself. Attempts to deal with all these new problems by traditional casework and remedial mental health practices will have about as much effect as trying to bail out a flooded room with a small bucket while the water continues to pour in from a burst pipe.

As early as the nineteenth century the germ theory of disease has highlighted the importance of the interaction of the host organism and its environment in the development of disease. Subsequently, programs to safeguard public health have been predicated on this interaction. Many disease states have been prevented or their consequences greatly minimised either by removing harmful influences from the environment or by fortifying the organisms' capacity to withstand harmful influences. These are the goals of primary prevention within the public health model. Yet the concept

of primary prevention has only recently gained its momentum in the area of mental health movement. Previously clinical ideas and activities were developing comfortably within a confined clinic setting. The preferred form of assistance was one-to-one interaction between clinical worker and client or else consultation. Emphasis was placed on evaluating the mental organisation of an individual according to one or other preferred school of theory of personality or psychotherapy. Such traditional approach has involved either removal of the "sick" individuals from the community or attempts to alleviate his distress through treatment of him. This is not to argue with a well documented fact that many members of our community suffer from clearly diagnosed mental disorders (retardation, psychosis, neurosis, brain damage) of such intensity that they warrant medical treatment and would need community care over prolonged periods of time in an institutionalised setting. At the same time we must not allow the traditional approach to obscure any distinction between this limited but severely handicapped group from those individuals who, through experiencing considerable distress associated with the problems of everyday living, evidence signs of inability to cope and disorganisation. When we begin to consider the needs of individuals with such particular mental health problems - numbering thousands in our community - it becomes blatantly impossible for the traditional mental health care ever to be relevant although the success of such treatment approach in the arena of physical health is not to be disputed.

The mental health movement has been in a state of great tension for the past decade or more. The late 1950's and early 1960's saw several events of significance. The outcome and "success" of

conventional approaches to resolving human problems were challenged. This led to a healthy, self-critical re-appraisal and review of the criteria concerned with mental health and treatment. Mental health professionals began to consider how to reduce the incidence of mental disorder as well as promote mental health.

This period also saw tremendous social pressures arise from the lower class disadvantaged in the U.S.A. Political encouragement was given to recognising and meeting the needs of these people under Presidents Kennedy and Johnson, which in turn served to emphasise even further the shortage of mental health workers to meet the increasing number of emotionally disturbed individuals and the need for development of new concepts and approaches. Such a shift in emphasis can be illustrated by the following story.

> Two fishermen saw a man floating downstream calling for help. They plunged in and carried him to shore. Right after they saw several other men floating downstream in similar distress. As they continued their rescues they were horrified by more and more cries from the stream. Suddenly, one of the fishermen stopped his rescue efforts and started running upstream. His companion shouted "Hey, where are you going? There are more people to rescue!" The first fisherman shouted back "I'm going to find the guy who is pushing them in!"

Thus, while concerned with rescuing we must also concern ourselves with prevention.

A. COMMUNITY MENTAL HEALTH APPROACH

The traditional view of mental illness uses the premise of the medical model and as such mental illness is being viewed similarly to physical illness. That is, the illness inheres in the person, and the treatment for this illness is focussed, quite properly, on the individual. When this widely accepted traditional framework "failed" to effectively handle problems within its mandated scope and as it "failed" to address itself to new relevant problems as they became identified, the professionals began to re-examine assumptions and consider alternatives. Through such scrutiny, the past dominant mental health approaches invite the following criticism:

1. They have not provided the manpower and resources needed to cope with evident problems and latent needs.

2. They have not solved the baffling problems of major mental illness or their pivotal techniques have had, at best, limited effectivenesss.

3. They either do not reach, or are inimical to, major segments of the population urgently requiring help.

4. They have not adapted enough to meet the new challenges posed by explosive social problems such as violence, drugs etc. and link them to disorder since they have not been seriously seen before as problems for the mental health field.

These and many others were the critical elements that have precipitated the current social-community ferment - a ferment of sufficient magnitude to warrant the designation "Mental Health's Third Revolution" (Hobbs, 1964).

This alternative approach is called Community Mental Health Model and as the term implies it covers all mental health activities carried out in the community. Notwithstanding the fact that its fine details remain fuzzy- the evolving social-community approach or framework offers a genuine alternative to prior dominant mental health approaches. It is active rather than passive and accords greater importance to prevention than to repair. It avoids the historically passive-receptive stance (wait and treat) and becomes more socially aggressive and relevent to its time (search and find). It's key components include analysis and modification of social systems, including engineering environments and man-environments, that maximise adaptation. It's person-oriented prongs stress such approaches as early childhood intervention, crisis intervention and consultation which vastly extend reach and promise more nearly geometric pay-off increments from finite resources. It turns away from a fixed-entities view of disordered behaviour and leaves open the possibility that many different adverse "end states" can be averted be effective environmental manipulation. In summary, it can be said that this new Community Mental Health approach presents us with a new theoretical position relating the likelihood of an individual's becoming disabled to his pattern of interaction in the community.

Presently, this approach rests on a combination of logic and faith. The intent of community mental health programs is in particular need of clarification and there are no established criteria by which the effectiveness of such programs may be assessed. In fact our knowledge of the effects of this type of therapeutic intervention is startlingly deficient. Relatively little attention has been shown for the need to evaluate the adequacy of the various types of preventive programs advocated by this new movement, perhaps because the efforts of professional staff have concentrated on the provision of services rather than on any test of their efficacy. At the present time, community mental health programs play a major part in the social welfare movement of our times and are now in a period of rapid expansion despite their relatively weak research base.

Such community-oriented approach has been called by many the "latest therapeutic band-waggon" and the mental health profession has been accused of trading one set of "horse-faiths" for another. Undoubtedly the new movement has brought many blessings and changed our orientation to mental health concepts. However, a hallmark of professional maturity is surely the capacity to look at band-waggons critically before jumping aboard, or at any rate before going all the way.

There are two major concepts embedded in the Community Mental Health model that require further reflection, program development, and research before one can say that this new social-community mouse-trap is a better one. The first area is that of environmental resources and the balance between them and the second concerns the

manpower issue. Thus the mental health professionals have been given a charge which they are ill-prepared to implement. Firstly, they are being called upon to make the environment of the individual a principal focus of intervention when tradition has practically ignored it. Although no field of treatment or rehabilitation, no organised attempt to alter human behaviour, is without continual confrontation by evidence that the environment in which the individual is embedded is principally responsible for the organisation or disorganisation, the maintenance or change, the appearance or disappearance of any behaviour - only recently have the professionals faced it as a phenomenon. For many years, rather than involve the environment in therapeutic reorganisation and, hence, harness the enormous influence on behaviour available there, the various professions have failed to develop ways of directing such forces towards therapeutically congruent ends and have perceived the natural environment as the enemy of therapeutic intervention. Only recently is this oversight being corrected by gradual changes in professional outlook, research and community effort.

A significant turning point in our attitudes towards mental health was the publication of the Joint Commission on Mental Illness and Health Report (1961) - a report which stresses the significance of environmental forces in helping efforts. It recognises the real potential for helping and for behavioural change that lies (at times dormant) in the natural environment. Treatment in the community by the community - is the central theme of the Joint Commission's report.

To date, our efforts to implement such a "slogan" have provided us with rather mixed results of success and failure. As yet there are no antibodies, serums or medicines which could protect the individual from the debilitating aspects of the "mentally" unhealthy environment. In order to harness, balance and co-ordinate the environmental resources so as to maximise their therapeutic efficacy we must first specify and understand the relationship between behaviour and the controlling events in the environment. But above all, it is the answer to the question of how does one person's behaviour affect the behaviour of the other that will have some bearing on our attempts to maximise and develop environmental therapeutic effectiveness. This brings us to the second area of concern within the community mental health framework - the manpower issue. If one accepts the premise of the new approach - that the place and personnel of therapeutic intervention are not to be separated from the community, that the continuity of concern must be maintained if the disordered behaviour is to be approached through social system in which the individual is embedded - then it will become imperative that a large number of so-called paraprofessionals and non-professionals in the community be recruited and trained to join the helping force. Thus for the second time we have been caught off guard since such techniques for using and training of paraprofessionals and non-professionals in the field of mental health have hardly been developed. It would not be unfair to say that the professional mental health personnel simply do not know what to tell people to do. They neither have the data at hand on which to make clear-cut-recommendations, with faith in the outcome, nor do they have strong theoretical principles dictating specific lay behaviour.

Although there have been some pioneer explorations in mental health de-professionalisations in the field of community mental health programs, there are still mixed amounts of evidence as to it's success or failure. Basically such training procedures relate to teaching of how to deal with certain rather simple problems, how to recognise the more serious ones and how to refer persons to the appropriate resources of treatment.

As the community mental health approach has begun to widen the range of agents who attempt to alleviate emotional distress by paying attention to the roles of several types of community members - they also encountered a strong professional resistance since at first glance such movement runs the risk of encroaching on professional turf. Not infrequently mental health professionals have gotten a bit "uptight" about the likes of lawyers, clergymen, educators and certainly police officers - people who have not gone through the profession's standard rites-de-passage - messing around with something so delicate as the human psyche. But despite many other reservations as to the soundness of the theoretical assumptions underlying such use of non-professional manpower, we must keep in mind the fact that the labour pool from which professional manpower is recruited is relatively limited and subject to the highly competitive demands of many systems and in addition, professional training requires a relatively long time - thus in the light of such facts alone, we can ill-afford such sanctimoniousness on the part of mental health professionals.

We are at present going through a period of rapid growth and changes in treatment, research and teaching with relation to mental health approach and all of these require increased manpower for their implementation parallel with a drastic increase in the public demand for services. Thus it seems far more realistic and probably healthier to support the widespread interest in exploring more innovative use of relatively untrained, abundantly available non-professional workers as a way of bridging the gap between perceived manpower needs and available manpower supply. In every community there resides a vast number of overlooked people with a wide range of intuitive, personal, human relations skills and knowledge of their community and its dynamics and as such they can be used to establish links between troubled people and community resources. In short the current belief is that:

1. the most effective point of intervention with the individual displaying behavioural disturbance is most likely the disturbing environment rather than the disturbing set of internal conditions; and

2. by offering mental health consultation we can provide knowledge and support for, and strengthen the hand of, those in society who regularly come in contact with human distress. The function of these informal mental health agents can be seen as twofold - a referral function and a treatment function.

Yet, as with many other "band-waggons", we are sufficiently plagued by our own history and failings to recognise that we will require a

persistent effort and years, if not decades, of evaluative studies to prove that the promise of Community Mental Health Model is no greater than its achievements.

So far the concepts of prevention, environmental resources and informal mental health agents have been discussed rather broadly since the main purpose was to briefly outline the conceptual model based on the theory of community mental health. However, they warrant a much closer examination since they are the building blocks of a theory and a therapeutic technique that was researched in this thesis.

The leading current theorist in preventive psychiatry is Dr. Gerald Caplan and his book "Principles of Preventive Psychiatry" (1964) should be read by all those concerned with mental care delivery. By definition - primary prevention is that preventive effort which is concerned with studying the population-wide patterns of forces influencing the lives of people in order to learn how to reduce the risk of mental disorder. Dr. Caplan considers such efforts to come under three main headings:

1. Primary prevention aims at reducing the incidence of new cases of mental disorder and disability in a population. Efforts are focussed both on modifying the environment and strengthening the individual's capacities to cope with situations.

2. Secondary prevention aims at reducing the duration of cases of mental disorder which will inevitably occur in spite of the programs of primary prevention. By shortening the duration of the existing cases, the prevalence of mental disorder in the community will also be reduced. This second stage of our efforts advocates early diagnosis followed by efficient and effective treatment.

3. Tertiary prevention is aimed at reducing the community rate of residual defect which is often a sequel of acute mental disorder. This stage deals with rehabilitation of those who have recovered from such illness so that they can be returned to full participation in the occupational and social life of the community.

The basic aim of all of these three preventive efforts is to reduce the community rates of mental disorder and its effects. Such "preventive" umbrella covers all members of the community, it deals with those individuals who define themselves as patients and seek assistance, those who do not avail themselves to help yet who suffer from mental distress and those who are currently healthy. It is in this very broad sense that the preventive approach contrasts with an approach which provides therapists and institutions with responsibilities restricted to their individual patients only. At the same time, although one could correctly assume the focus of primary prevention programs is the welfare of the total community, one would be wrong to suspect that the most basic unit of it, the individual, is lost

in this overarching effort. On the contrary, he is more than ever the focus of attention but this time in his total context. For example, the programs dealing with the well-being of young children are still very much a child-centred efforts in this approach but go beyond the immediate and become family-centred and eventually society-centred.

At present, however, primary prevention is clearly more a hope than a reality, however there exists a body of plausible assumptions about various factors which may be significant in determining the health of a community. Some of these assumptions are based on experiments others are inferred from theory. A great deal of them are based upon experiences in psycho-therapy and clinical research. Others are derived from epidemiological studies which demonstrate the existence of different sets of conditions in communities which have high rates of mental disorder as contrasted with those which have low rates.

Caplan's conceptual model of preventive approach divides the environmental influences or resources on human development into long-term and short-term factors and then subdivides the nature of the factors into physical, psycho-social and socio-cultural.

1. Physical resources - the nature of such resources is self-evident by the term alone, it relates to all necessary provisions to foster growth and development and maintenance of the bodily health upon which mental health is dependent. These include such basic needs as food, shelter, sensory stimulation, sleeping, opportunities for exercise etc. There

are numerous studies which appear to imply strongly that certain aspects of the physical environment have direct psychological consequences of significance to mental health. The effort of inadequate environmental stimulation and its consequent effect on cognitive development is still at present under intensive investigation although the work of Hess (1965) and Deutsch (1964) is sufficient to indicate the importance of the early perceptual experiences of the child for later intellectual development.

2. Psycho-social resources - these include the stimulation of a person's intellectual and emotional development through personal interaction with significant others. These include members of his family, peers and other persons in his immediate social network. It is a well accepted assumption that through such face-to-face interchanges the person satisfies his needs for love and affection, limitation and control, and participation in joint activity which provides opportunities for identification and identity formation. A central issue here is the maintenance of a health family environment. The maintenance of family ties is not only important in childhood but throughout life, particularly in old age.

3. Socio-cultural resources - these represent the structure of the community and its culture which strongly influence our personal development and functioning as members of it. The expectations by others of a person's behaviour have a profound influence on psychological development and the growth of self-esteem. Man's place in the structure of his society is

determined by others to a large extent, and they prescribe his path in life to a considerable degree. If a person happens to be born into an advantaged group in a stable society, his social roles and their expected changes over a lifetime will tend to provide him with adequate opportunities for health personality development. If, on the other hand, he belongs to a disadvantaged minority, suffers from economic deprivation, or is a member of an unstable society, he may find his progress blocked and he may be deprived of opportunity and challenge. This, in turn may have an adverse effect on his mental health.

Thus considering all of the above basic resources in an individual's environment, it is not difficult to envisage that if such basic resources are not adequately provided over the long term, the likelihood of psychological disfunction will increase.

The concept of "poverty", although it remains extremely hard to define and carries altogether different meanings in urban and rural contexts, still provides us with a clear cut illustration of the delicate inter-relationship between physical, psychological and social resources in our environment, and the relationship between a long-term inadequate provision of such resources and mental health deterioration.

In the literature on mental health, there are numerous mental health surveys, which provide at least some evidence of the degree of overlap between social class, economic hardship and

psychological well-being. The factor most frequently related to mental health problems is the socio-economic one. This was borne out by the now classic Hollingshead and Redlich (1958) study which showed how a great many more people in the lowest socio-economic strata became mental hospital patients, while those in the higher strata were not hospitalised but remained in the community for care and treatment. Initially, the authors thought this was simply a result of the greater ability of the more well-to-do to buy treatment in open market. However, after a closer look they were forced to conclude that treatment in the community tended to be restricted to a middle class island of the population and that one could speak of the cultural distance between the poor and the middle class as being the factor which determined hospitalisation or non-hospitalisation. While this was not really new, Hollingshead and Redlich documented it.

In the last two decades an enormous amount has been published on the question of the relationship between social class and mental health. In the Midtown Manhattan Study on mental health problems, 24 percent of all New Yorkers interviewed showed current life problems and sufficient distress to be categorised by the surveyors as impaired - Langner (1964). However, the one-in-four figure of the general population was not constant and considerably more people were under stress in the lower socio-economic group. When socio-economic class was compared, it was found that the poor reacted with proportionally greater strain to equal degree of stress, and that some of the most forceful stress items were problems of unemployment and worry..

about work. Hinkle (1961) was able to relate such factors as job change, immigration, etc. to illness episodes in life histories of the individuals and families he studied. Earl Koos (1946) who conducted an impressive two-year study of low income New York City families, eloquently conveys how marginal economic existence sensitizes a person to even minor life stresses:

> "As the investigator strips off the outer layers of low-income urban existence he becomes increasingly aware of its hand-to-mouth quality. Only the things that must be done managed to get done. There are no sheltered reservoirs within which man can store up his surplus thoughts, energies and products - and not surprisingly, because for people living under these conditions there are no surplus thoughts and energies and products. They need all their energies and every cent they can earn in order to meet the day-to-day demands, and they know that their environment will make endless demands upon them whichever way they turn. Life under such circumstances takes on a nip-and-tuck urgency that belies our culture's middle-class ethos of a reasoned calculation of one's future.
>
> "Individuals and whole families of individuals suffer from these pressures. Housewives lament that they can buy only for the next meal because there is no place to store additional foods. Wage earners know that every cent they make is mortgaged in advance simply to keep up with basic expenditures, and they curse and worry because they cannot save for a rainy day. Adolescent girls have no place in which to entertain the "boy-friend" because home offers no opportunity for privacy. Only the youngest members of the family can dawdle and dream beyond life's immediacies, and they, too, suffer indirectly."

Bruce Dohpenwend (1966), a New York sociologist, is also challenged by the fact that the poor face a greater mental health risk than those who are better off and is systematically exploring the degree to which this is a result of a steady downward press by powerful social factors.

To repeat, the fact seems well established that the poor have greater stress in their ordinary lives and seem to respond in a less effective way than others in coping with everyday problems. But how can this be accounted for? The answer to this question is crucial to the whole mental health movement if we are to plan the most effective help. A number of mental health professionals are beginning to see the concept of crisis as a useful bridging concept in clarifying, in the absence of other firm information, the relationship between the poor, multi-problem families and the way they respond to stress and psychological well-being.

There are a number of general characteristics that have to be taken into account in understanding people's reactions to crisis events, among these the following three rather common aspects of crisis would be outlined since the aspect of economic status can be related to each of them. First, only the person affected can satisfactorily define the crisis. Second, the capacity of an individual or family to cope with the crisis events makes a considerable difference in how such an event is met. In a well integrated, well functioning family, an external crisis may simply bind its members more strongly together. On the other hand, a poorly functioning individual or family may be stunned and disorganised. The third aspect of crisis that has been studied and seems relevant in this context, is the cumulative effects of recurrent disruption on either individuals or families. To take the first point, definition of a stressful event by the individual or family involved. Since the perception or subjective interpretions

of stressful events vary widely from one individual to another, they should also vary when made by different socio-economic groups. One would expect that a family on the margin of poverty will perceive disproportionally an econimic threat as compared to those in the middle class. On the other hand, lower class people tend to be less sensitive to shameful revelations about the family than the status conscious middle class. With regard to the second and third points, as noted in the Manhattan Study cited above, in the culture of poverty the sheer frequency and number of stress inducing episodes is much greater than in the middle class life and when findings from Koos' study are added - that those punished by economic deprivation tended toward permanent demoralisation, a blunting of the family sensitivity, and a tendency to be more vulnerable to future exposures - it is not difficult to assume that once having been defeated by a crisis, the family might not be able to marshall its forces sufficiently to face the next event, and in this sense each time there was a lasting defeat.

With the recognition that life crisis are nearly universal - but for most people, well coped with and strengthening, rather than defeating - comes the possibility of organising health and social services specifically related to these critical turning points. If, for example, low income can be shown to sensitize certain families to behave differently in the face of crisis, differently because of their perception of the event, their adequacy of response to it, and in their overall resilience to meet a succession of disturbances, then the

mental health workers are presented with an unmatched opportunity to "turn the tide" through well timed and appropriately planned intervention.

As stated before, Caplan's theory of primary prevention is in two sections: the first section is concerned with gradual (long term) influences on mnetal health and the second with occurrence of sudden stressful events (short term), that, short periods usually marked by psychological upsets which may have an adverse effect on an individual's mental health.

The discussion so far has concerned itself with the premise that inadequate interaction between the individual and his environment will effect the steady process of psychological development if it is "long term" in duration. But there exists evidence that mental health deterioration can take place if provisions of such basic resources, as discussed above, is interrupted for a relatively short term only. These short term demands on an individual and his patterns of adaptation are called "crisis" periods.

The concept of "crisis" has captured the imagination of many mental health professionals. There is a growing body of work in the social-psychological field known as crisis studies and findings to date point to the potential value of studying the psychological processes which take place during such periods in order to find leverage points for improving the outcome. Although such studies have been conducted by

people with different approaches and different topics, with a very diverse set of theoretical and applied interest, there is a common factor among them in that the crisis being considered are viewed as turning-points, which result in intense and distressing experience for the individual concerned as well as being of the utmost importance in the effectiveness of adaptation and psychological development throughout his life.

If the crises are handled advantageously it is assumed that the results for the individual and/or group are some kind of maturation or development. Failure, on the other hand, assumes that old psychological conflicts may be revoked or new conflicts may arise and a state of poorer mental health may be the result. Further, it is suggested that the person undergoing the crisis is amenable to influence when skilled intervention techniques of relatively brief duration are applied. Therefore, in general terms "crisis research" is a term that reflects the attempt of the workers in the field to capture the meaning of stressful life situations that pose "coping" tasks for individuals, families and groups. Some of the events are related to the normal phase of psycho-biological and social development, some are accidental and peculiar to the life of certain segments of the population.

The "crisis" concept provides the mental health profession with a number of very attractive propositions which must not be overlooked. The concept of crisis embodies the advantage of relatively circumscribed periods of time and

is therefore subjected to the degree of control not afforded by other approaches. It encompasses the entire range of emotional disorganisations from normal everyday stress situations to the clearly pathological ones, thus providing an opportunity for the beginning of the study of a less clinically dramatic situation, much as medicine has shifted from its exclusive preoccupation with severe illnesses. Since crisis periods represent transition points, at each of which the person may move nearer or further away from adaptive patterns of functioning then therapeutic services during such period could be seen as relatively small investments with a high payoff in a sense of averting disastrous consequences or building new strengths and adaptive resources. The nature of crisis concept lends itself to application by all disciplines concerned with reaction of human beings to life-situations, but above all once refined it will aid the mental health frontier in shifting from the amelioration of illness to preventive intervention at the community level.

CHAPTER II: THE CONCEPT OF CRISIS

A. General Comment

The concept of crisis has served as a useful framework within which to consider the reactions of persons to a wide range of events. The word "crisis" is one which the layman and professional alike are familiar with. It forms a regular part of our modern-day vocabulary. As such, its meaning is changed by multiple usages and referrents. It is also a word that connotes a complex and exciting area of problems in many different fields of inquiry and professional practice and it is clear from review of the literature that much has been learned about the concept from clinical experience and research. Yet, in spite of the importance of the concept, the term "crisis" remains one of those particular terms which is understood by everyone when used in a very general context, but understood only by very few when an operational definition is desired which is sufficiently specific to enable the precise testing of certain relationships.

If one asked people "what does crisis stand for?", one could predict two kinds of responses. One set of responses would have grisly and negative connotations - "war", "death", "critical points", "disorder", "chaos", "danger", "disaster" and so on. On the other hand the term would carry a positive connotation - "opportunity", "excitement", "development", "growth", "drama", "time for decisions" and so on. This dichotomy of terms could indicate a basic ambivalence in us, individually and collectively, towards "crisis", and these mixed attitudes are justified in empirical reality. Crisis situations can and do bring disorder, destruction and death to human affairs. The greater part of our life is lived in the region of habits - they become safe and serviceable. They have been tried

and they are associated with a feeling of security. There consequently grows up in the folk-mind a determined resistance to change, and there is a degree of sense in it, for while change implies possibilities of improvement it also implies danger of disorder or a worse condition. It must also be acknowledged that a state of rapid and constant change implies loss of settled habits and disorganisation. Nevertheless, while we seek in our own ways an environment and a way of life that are conducive to minimisation of personal crisis, it is doubtful that such a state of affairs can ever be attained or would necessarily be to our ultimate advantage. In fact, many students of the concept are prepared to defend the thesis that all individual growth and social progress involve the facing and rationally creative resolutions of conflicts. In the words of one of the oldest students of this concept - W.I. Thomas (1909):

> "Attention is a mental attitude which takes not of the outside world and manipulates it; it is the organ of accommodation. But attention does not operate alone, it is associated with habit on the one hand and with crisis on the other. When the habit is running smoothly the attention is relaxed; it is not at work. But when something happens to disturb the run of habit, the attention is called into play and devises a new mode of behaviour which will meet the crisis" ... "To say that language, reflection, discussion, logical analysis, abstraction, mechanical invention, magic, religion and science are developed in the effort of the attention to meet difficult situations is simply to say that the mind itself is the product of crisis"... "It is, of course, possible to overwork any standpoint, but on the whole I think that the best course the student can follow is to keep crisis constantly in mind - the nature of the crisis, the degree of mental and cultural preparation people have already attained as fitting it to handle the crisis and the various and often contradictory types of recommendation effected through the attention. In this way he will be able to note the transition of blood-feud into law, of magic into science, of constraint into liberty, and in general, the increasing determination of conduct in the region of the reasons and the cerebral cortex instead of the region of habit and the spinal cord."

Whether one supports such position or not, one must agree that a "utopia or no crisis" is a fantasy, necessary for many as a motive in life, but unreachable. The biological and social challenges of the various phases of life from birth to death ensure for everyone both sudden and gradual crisis. Thus we must encourage the creative utilisation of "crisis" events in human affairs. Develop means of accurate estimation of the nature of the crisis, its potentialities in terms of growth or destruction for those involved, and the best deployment of our resources for helping to actualise more of the former potentialities than of the latter. This could be achieved in maintaining and building in each person and other human systems a methodological character tuned to enacting growth releasing resolutions of conflicts whenever they may appear. It is to remember John Dewey's wisdom - "He who would think of ends seriously must think of means reverently."

B. Historical Origins and Relationship to Other Theoretical Systems

To trace the background of crisis concept, we must examine the multiple sources from which it developed. The concept of crisis is rooted in several disparate bodies of theory and practice, some of which developed quite independently and others which have converged, focus, and, in some cases, separated again to go off in new directions. No one particular discipline can lay claim to ownership, although the Harvard Schools of Psychiatry and Public Health have probably been most active in pioneering and developing the foundations of the crisis framework, at least within the mental health field. Crisis theory and the principles of crisis intervention as they have been synthesized by Gerald Caplan and his

colleagues at Harvard (Caplan, 1961, 1964, 1964) has its primary roots in psychodynamic personality theory, in stress theory and in learning theory with sideshoots reaching into systems theory, role theory and communications theory. Crisis theory, as presently formulated has also been derived from observations in the fields of sociology, social psychology, case work and ego psychology as well as incorporating general psychiatric and preventive medicine principles. One could say that the soil for flowering of the "crisis theory" approach, as we know it now, has been in preparation for many years with Caplan and his colleagues acting as catalysts.

The effects of periods of stress on individuals and groups have long been recognised and have been eloquently portrayed in literature and drama. From time immemorial novelists and dramatists have dwelled upon the concept of crisis as a turning point in life development of their characters. The element that makes most for dramatic excitement is the fact that crisis has a peak or sudden turning point during which in the face of adversity the hero manifests unexpected strengths and talents.

Wartime practice tended to focus upon the traumatic neurosis induced by combat experience, but the same experience was often associated with maturation and strengthening of personality, with increasing self-reliance and improved capacity for leadership and initiative. Even the stress of officer training school was often described as a "make or break" experience.

The concept of crisis is common to certain medical theories. The Hippocratic crisis involves rupture, discontinuity and

refers to rules which articulate other aspects - for example, critical days, paroxysm, acme etc. It is not uncommon to hear doctors speak of turning points or critical periods of disease implying the possibility of the worsening of the condition or a change for better and improvement.

Political scientists have always paid attention to moments of danger or suspense in politics. They have developed the notion that every dictatorship arises during a period of crisis (Hertzler, 1940). Thus the crisis concept is being already viewed as a "transitional period" presenting an individual with, on the one hand, an opportunity for personality growth or maturation, and, on the other, a risk of adverse effect with increased vulnerability to subsequent stress.

Crisis concept has been a generally accepted link in the etiological process of mental illness. In clinical practice the concept of "breakdown" or failure of adequate functioning following some major stress is familiar in both psychotic and neurotic disorders. Crisis concept is also compatible with the widespread idea that psychic conflict is the root of all functional mental illness since the writing of Meye (Lief, 1948) and Freud (1924). Although Freud and his followers were criticised for depicting behaviour as impelled by "inner" forces in the forms of needs, drives and impulses often operating below the level of consciousness, he has not discarded the view of mental disorders as patterns of human reaction set in motion by stressful external situations. As early as 1917 Freud has suggested bereavement as a topic for study. He has drawn attention to the way in which reminiscences about a

missing object repeatedly confront the mourner with painful comparison between the richness of his past life when the beloved person was alive and the present and future. His theory of the work of mourning postulates that as the person engages in this form of bereavement, he gradually "works it through" so that he comes to accept the limitations imposed by the loss, regains his interest in daily activities, and ultimately is able to console himself. In his early writing Freud (1936) has also dealt with the concept of anxiety which has an integral part in Caplan's formulations concerning ego processes in crisis. Freud distinguished between "neurotic anxiety" arising from inner dangers linked with the person's unconscious impluses and "normal fear" (or "objective anxiety") occurring when a person is aware of a known danger. He wrote, "When the ego's adaptive and creative capacities are inadequate to handle the simulus (change of input to the system), the mild anxiety signal evoked by any stimulus is replaced by increasing anxiety, which constitutes a persistent and increasing threat to ego equilibrium and integrity". He recognised, however, that the question of whether or not the person is aware of an external danger is not entirely dependable. Studies of people facing the threats of surgery, epidemics and large-scale disasters bear out Freud's observations that reality-oriented fears are sometimes heavily overlaid with neurotic anxiety or neurotic guilt (Janis, 1958; Wolfenstein, 1957).

Personality theorists that followed Freud have frequently been impressed by the importance of relatively circumscribed environmental events in influencing behaviour, and the literature reflects such wide attention to the study of man's response to

his environment and symbolic constructions which define threat and help him to deal with it. In the field of psychodynamic theory, important evolutions in the last thirty years have contributed significantly in the area of ego growth and mastery. Theoreticians turned their attention to the synthetic and executive aspects of the ego, such as cognition, perception, intention, motility, etc. which offered a far more optimistic outlook for personality growth and development than the earlier, more deterministic id psychology. Fenichel (1945) differentiates between successful defences, which bring upon a cessation of what is being warded off, and unsuccessful ones, which necessitate a repetition or perpetuation of the warding-off process. White (1959) feels one should pay careful attention to the way in which defences adopted at times of crisis lead to "actions of an efficacious sort which work well upon the particular environment and thus become the basis for the continuing growth of competence and confidence." This closely applies to Caplan's view of crisis, since it is such temporary weakening of the defence mechanisms during crisis situations which lead him to suggest that the period of crisis offers a time-limited opportunity for effective intervention. Lois Murphy (1961)[2] introduces the concepts of "coping devices" and "problem-solving activities" which refer to the way in which individuals learn to adapt and master internal and external pressures. He makes an interesting distinction between two kinds of coping: "the capacity to maintain internal integration along with the resilience or potential to recover after a period of disintegrative response to stress"' and "the capacity to make use of the opportunities, challenges, and resources of the environment and to manage the pain, frustration, difficulties and failures with

which he (the child) is confronted". This learning to cope more successfully with stressful situations is one of the keystones of crisis theory. Finally, John and Elaine Cumming (1966) maintain that ego develops through a series of disequilibriations and subsequent re-equilibriations between the person and his environment. Successful crisis resolutions promote ego growth by increasing the repertoire of ego-sets available and increases the ability of the individual to cope with future crises. This assumption is yet another important aspect of crisis theory in the sense that it views crisis as an opportunity for growth and change.

Meanwhile Erik Erikson was independently evolving his epigenetic approach to personality development. Erikson (1953) had described the interaction of biological and environmental factors in the course of normal personality growth as a series of developmental crisis. Each psycho-social crisis is precipitated by the steady maturation of the child and the increasing pressure from its social environment. The quality of psycho-social adjustment at maturation depends a great deal upon the effectiveness of the individual's management of these developmental crisis. Erikson feels that such psychodynamic concepts as the sense of basic trust, the sense of autonomous will, and the sense of initiative are crucial to the development of the individual, through ascendant of different periods. In 1968 he writes: "Each stage becomes a crisis because the incipient growth and awareness go together with a shift in instinctual energy and, at the same time, causes a specific vulnerability in that sphere of the personality." Crisis, he points out, denotes not a threat of catastrophe, but a turning point, a crucial period of increased vulnerability yet heightened potential.

Coincidental with the development of the psychodynamic theories concerning human behaviour was the emergence of learning theory ideas of human behaviour from the experimental psychology laboratory into the natural setting. Developments in learning theory shifted the focus of causal analysis from hypothesised inner determinants to detailed examination of external influences on responsiveness. Human behaviour was extensively analysed in terms of the stimulus events that evoke it and the reinforcing consequences that alter it. In the social learning view - a man is neither driven by inner forces or buffeted helplessly by environmental influences. Rather, psychological functioning is best understood in terms of continuous reciprocal interaction between behaviour and its controlling conditions. Man's superior cognitive capacity is recognised as an important factor that determines, not only how he will be affected by his experience, but the future direction his actions may take. Learning theory has outlined many models for how patterns of behaviour are acquired and how their expression is continuously regulated by the interplay of self-generated and other sources of influences. One such method is called "learning by direct experience" and it is one that most closely parallels the behaviour changes in crisis situations.

Briefly, in the social learning systems, new patterns of behaviour can be acquired through direct experience. The more rudamentary form of learning, rooted in direct experience, is largely governed by the rewarding and punishing consequences that follow any given action. People are repeatedly confronted with situations with which they must deal in one way or another - the crisis situation

is just one of the many. Some of the responses that they try prove unsuccessful, while others produce more favourable effects. Through this process of "differential reinforcement" successful modes of behaviour are eventually selected from exploratory activities while ineffectual ones are discarded - this parallels closely the behaviour in crisis resolution attempts. It is also assumed that responses are automatically strengthened by their immediate consequences and it is this "man's cognitive skills" that enable him to profit more extensively from experience than if he were an unthinking organism. Thus within such framework of social learning theory, reinforcement primarily serves informative and incentive or motivational functions as well as having response-strengthening capabilities. Viewed from such a broad "learning" perspective, successful crisis resolutions in one's life can become reinforcing in themselves and serve as a strengthener of one's capacity to cope, while an accumulation of negative crisis resolutions can serve to reinforce one's lack of confidence in coping and support the use of inappropriate behaviours.

There are a number of other parallels between the principles of behaviour modification as put forward by learning theories and those applied to handling of crisis situations. There are commonalities, for example, in handling the anxiety which is produced by certain fear-arousing stimuli in person's environment. One obvious characteristic of a person in crisis is his overt anxiety about the overbearing situation or impending stress. The person is "disturbed" by his anxiety plus whatever avoidance behaviour it may set off. Anxiety occupies a central position in learning theorists's orientations and its handling is best

represented by Wolp (1958) a member of the classical conditioning group. He observes that as long as a situation elicits anxiety states the person will be disturbed and may exhibit other maladaptive escape behaviours. The key to intervention in the Wolpian technique is to arrange for the anxiety to occur at moderate, if not low, and hence manageable, levels, which will not prevent the individual from engaging in adaptable behaviours. Such reduction of anxiety level is usually the first step in dealing with an individual in crisis and is usually achieved through making him face facts in manageable doses, outlining his capacity to overcome what appears to be an impossible situation, engaging him in immediate action oriented response and so on.

The applied behaviour modification model (Carter, 1970) with its emphasis on the cognitive aspects of experience, on learning how to change and how others perceive the individual provides guidelines for the worker with a client in a crisis situation. The basic premise of such a model is that "shaping" or relearning of behaviour is directed towards helping the client to engage in more socially acceptable, less pain-producing activity and in learning more productive ways of dealing with a problem situation, which is very similar to the position of the crisis intervention practitioners. Recent experiments by behavioural modification proponents suggest that coping behaviours which have been reinforced at the time of crisis are stronger and those extinguished are weaker at times of subsequent crisis. The experimenters suggest that family caseworkers who work with parents, train them to expose their children to a series of varied real-life crisis, systematically graduated in

difficulty, to help them develop flexible coping repertoires which will be resistant to extinction (Cohen, 1971). This is, of course, close to the "anticipatory guidance" technique used in crisis intervention field, which will be discussed at length in a later section.

Crisis theory formulations have a long standing connection with stress theory, so much so, that the term "crisis" and "stress" are used interchangeably through the literature that annually emanates from books and journals dealing with it. There are no agreed-upon conventions concerning the use of these two terms although some attempts have been made to differentiate crisis from stress - if indeed qualitative differences can be shown. In its original engineering usage, the term "stress" was often given a negative connotation and linked with "strain"; this has carried over into the psychological research in this area. Stress is assumed by many to have a purely pathogenic potential, being viewed as a burden or load under which a person survives or cracks. In contrast, a state of crisis is conceived to have a growth-promoting potential and the term "crisis" tends to imply a more positive challenging connotation. Lydia Rapoport (1970) points out that the term "stress" has been used variously to describe three kinds of phenomena by those who concern themselves with the crisis concept. Stress has been equated with the noxious stimulating condition, the stressful event of situation, sometimes called the "stressor"; it has been used to describe the state of the individual who responds to the stressful event; and as an overall concept of the relation of the stressful event, the individual's reaction to it, and the events to which it leads. Starting from Hans Selye's early

interest in the 1930's, the performance of individuals under various stress situations was examined from biological, physiological and psychological aspects. With Cannon's concept of homeostasis and Herrick's theory of systematic equilibrium as a background, Selye (1956) proposed a series of stress stages: first, an alarm reaction, consisting of successive shock and countershock phases; second, a resistance stage during which maximal adaptation is attempted; and finally, a stage of exhaustion when adaptive mechanisms collapse.

Experimental psychologists have examined reactions under naturally stressful conditions or through laboratory studies where stress-producing variables were systematically introjected. Many researchers began to record reactions to large-scale community disaster situations and mention should be made of the work done by the Diseaster Research Group (1961) with its inventory of 114 field studies. A special issue of Human Organisation (1957) was devoted to work on disasters, facilitated by the National Research Council's Committee on Disaster Studies. Community disasters were shown to produce three overlapping phases: a period of impact, a period of recoil and a post-traumatic stage. Later researchers observed that while each community disaster followed its unique pattern seven common stages could be discerned: warning, threat, impact, inventory, rescue, remedy and recovery. Although most of the models put forward by mass disaster studies are suited to larger groups and societies, there appear to be a number of parallels between the type of stress experienced during such situations and the response of an individual to a more personally limited crisis.

The observations and theoretical propositions dealing with role of information in crisis resolution as reflected in the paper by Williams (1957) is of particular value in this regard. Williams suggests that "The general function of communication in crisis is to provide the actor with information which will enable him to make a choice to avoid, minimise or remedy the consequences of the crisis."

In the 1940's and 1950's, military psychiatrists, as a result of experiences during World War II and the Korean conflict, were attempting to predict the performance of soldiers who might later break under field pressures. Early theories of a "stress personality profile" turned out to be unpredictive under subsequent tests. Under the influence of psychoanalytic theory such researchers assumed that the individual personality is more important for predicting both the occurrence and outcome of crisis than the current relational milieu. Although the "situational focus" was not new it was only when a greater emphasis was placed on both the individual and the problem situation, the researchers arrived at a more clear understanding of the manner in which the "combat" behaviour was more influenced by practical circumstances and group support than by individual personality characteristics. Epidemiological data produced by Glass (1958) indicated that the incidence of combat neurosis was related more to circumstances, such as social pressures and social support from the solider's buddies, of the combat situation than to personality factors. Glass has also found that treating neuropsychiatric casualties as close to the front lines as possible had led to a much higher salvage rate than was the case when they were treated far from their unit.

In similar "combat" army situations, Bushard (1958) concluded that it was best to leave the soldier in the situation from which he was trying to escape and to treat him there. Thus, the stress personality theory was eventually revised to include current situational factors which could mitigate underlying pathology. This, of course, also applies to crisis and as such most crisis workers emphasise working with the social network of individuals in crisis. Not only is such environmental network of significant others usually involved in the crisis situation, but it also has a great impact on the individual's technique and success in meeting the crisis.

In the field of stress theory and research, studies by Richard Lazarus are of particular interest and relevance since the model of crisis and crisis resolution under discussion in this thesis is markedly similar to Lazarus' cognitive model of coping with psychological stress. According to Lazarus (1966), a stimulus creates threat in an individual if it arouses the expectations of interference with an important life goal. The expectation of such "psychological harm" is accompanied by appropriate affective reactions such as fear or anger. The appraisal of threat is a cognitive process of evaluating both stimulus-based and personality-based cues of impending harm and counterharm (mitigating factors). The more serious the appraisal of threat, the more repressive and primitive are efforts to cope with. Coping is also a cognitive process and dependent on stimulus-based cues and personality-based cues. The cognitive processes of threat and coping appraisal occurs simultaneously. In terms of crisis situations, Taplin (1971) advocates the use of such a "cognitive" perspective, with its emphasis on information processing. He suggests that the person

experiencing the crisis had previously been able to think, perceive, remember, evaluate, respond to people, and make decisions; now these processes have been interrupted. He must learn to acquire new information, build "cognitive maps" and adapt in order to develop his capacity to design and select among coping strategies. Successful crisis resolvers are those who have learned to call upon such strategies to solve problems at such times, and which will stand them in good stead in the future.

A discussion of the historical origins of the crisis concept and its connection with other theories would not be complete without a reference to the formulations that have been derived from observations in the fields of sociology and social case work. To say that the sociologists have up to the present used the crisis concept most extensively would not be inappropriate. The symbolic-interaction view of crisis behaviour such as those of Thomas (1909), Mead (1934) and more recently that of Cooley (1956) has developed concurrently with psychodynamic approaches and behavioural experimentations in other social science fields. Within the symbolic-interaction view, man's nature and social needs are moulded and nurtured through psycho-social development and contact with other people.

It was Mead especially who emphasised that the "self" was derived through the interaction of symbolic communications, and thus man's potential capacities were as rich as the symbolic environment that man could create. Although the symbolic-interaction view took account of the fact that man's opportunities could vary as a result of group membership, at the time time, it left considerable room to regard man as an active participant in social process.

Thus unlike the psycho-analysts, they argued that control of and adjustment to the environment results from the active manipulation of knowledge. According to these social theorists, it is the culture of the group that limits the power of the mind to adjust to adversity and changing circumstances. Thus if knowledge is insufficient and material resources are scanty, the individual will find no way out of the crisis situation which under different circumstances would be only an occasion for future progress. The sociological approach also emphasises the importance of "cultural values" in the definition of and reaction to crisis. For example, the difference in the Western and Japanese attitudes towards death; the institutionalisation of rites-de-passage, which help individuals cope with major transitions in role relationships; the toleration of grief reactions and so on. Through such repeated emphasis on the importance of the individual's relational milieu, his reference group, social network and community, as some of the supports which influence crisis outcome, the sociologists have helped to place the concept of crisis into a more interpersonal and socio-cultural perspective. They have expended the more psychological oriented approaches to crisis from the stress on a more intrapersonal, individual adjustment to crisis situations to the kind of approach that places greater emphasis on the individual's present situation rather than on his past experiences and personality.

Family sociologists have been examining the structure and roles of family members, during crisis producing events for many decades. In a majority of such studies the primary focus has been on the disruptive effects upon family solidarity and the phases of

disorganisation and reorganisation. The sociological approach to crisis is exemplified in Hill's (1949) and Koos' (1946) earlier studies, in which they demonstrated that when an individual family member is involved in a crisis the whole family must readjust. If one accepts the premise that a person's present state of mental health can be viewed as a product of the manner in which a series of crisis have been solved in the past, a similar analogy has been drawn with respect to families by Hill and Koos. Permanent defeat in low-income families was noted by Koos, in the sense that once defeated, the families he studied were not able to marshall their forces sufficiently to face the next event. Hill has concluded that a successful experience with a crisis tests and strengthens a family, but defeat in a period of crisis decidedly weakens family structure and morale. Hill (1958) proposed a framework for stuying families in crisis which emphasises the family's crisis-meeting resources and ability to anticipate crisis. He saw three key elements determining whether a given event would precipitate a family crisis: the external hardship; the internal resources of the family such as its role structure, flexibility and previous history; and the definition it makes of the event. Rapoport (1962) suggests differing treatment approaches for different family types. She recommends a general therapeutic activities keeping explicit focus on the crisis and managing the affect; offering basic information; and creating a bridge to community resources.

Social workers have always been confronted with clients seeking help because of problems generated by the ill effects of stress and have always worked in an "person-in-a-social"configuration

context. Although traditionally social workers were interested in the cruder aspects of the environment (size of the room, or the number of people in the family or the physical conditions they live in and so on), as sensitive people they quickly became aware of the so-called "emotional" factors in the environment and came over to start a partnership with other mental health professionals. By the early 1960's social workers were becoming increasingly concerned over lengthening waiting lists and staff shortages, on the one hand, and frequent dropouts or unplanned termination on the other. Such serious questions regarding the choice of clients and treatment arrangements sparked the search for new approaches which could offer a better "pay off" and greater expectations of success. Ritchie (1960) describes an intensive, six or seven-hour per day, two-treatment of families in crisis. It is called "multi-impact therapy" and involves, at times, the family being seen simultaneously by more than one member of the treatment team. Kaffman (1963) also discusses a technique of short-term family therapy.

With the development of crisis theory, social workers unlike many other mental health practitioners quickly seized upon it as the answer to some of their professional frustrations but above all they welcomed this since it provided the theoretical justification for what many of them had been doing intuitively or on an ad hoc basis. So it should not come as a surprise if the social workers would view the excitement of other professionals with the new frontiers opened by crisis intervention programs with a somewhat less "emotional" response. Nevertheless, throughout the last decade an increasing number of reports have been published on

social workers' use of crisis intervention. These have ranged from early experimental accounts of the "we-did-it-and-it-worked" level to highly sophisticated research studies of crisis-oriented brief treatment. Thus in the field of social work practice, sometimes tentatively and sometimes as a broad reorganisation of agency priorities, crisis intervention techniques was accepted as an approach for serving clients.

C. Problems of Definition

Despite the familiarity, apparent simplicity and widespread acceptance of the concept, crisis is not an easily defined concept, yet research on crisis phenomena must begin with an attempt to define more clearly which events shall be called "crisis". The term "crisis" at present is not a scientific construct but rather a common-sense word generally used to describe the situational conditions that presumably give rise to it and the response patterns of the organism undergoing the experience. It is doubtful that any single definition will cover all types of events of interest to the student of crisis concept. Much will depend upon the objectives or special interests of the researcher. Given all this diversity of phenomenal referrant and of definitions, how can one best proceed to "come to grips" with the problem? One strategy is to abandon the concept or rather the term altogether. Another is to define the concept rigidly. A third is to accept the concept as a general rubric, a focal concept, which has heuristic value for connecting seemingly diverse areas of application. All of these are imperfect strategies entailing risks. However, if we shift from an attempt to determine what the phenomenon of crisis is, to a consideration

of what kinds of phenomena have been referred to and investigated under this label and how those phenomena are related to one another, we many be able to find some semblance or order here.

Eastham (1970) writes: "It would seem that the present ambiguity of the term should be preserved, and that its current usage by clinicians to refer to the whole sequence of occurrences has advantages in emphasising the uniformity in the total process, but that for research purposes crisis cannot be put into operation except by breaking it into components selected and inter-related to do justice to the global concept." In other words the boundary between what is included and what is not included in a crisis concept might appropriately be kept fluid and deliberately vague so as not to restrict unduly the span of inquiry, but precise definitions of concepts are required, however, as one advances beyond initial exploration towards the testing of hypotheses which have been advanced involving the concept. This phase appears to have been reached regarding the concept of crisis. If we are to accept the two major assumptions of crisis theory that: (a) a person in crisis is more susceptible to being influenced by others than at times of relative psychological equilibrium and (b) that by deploying helping services to deal with individuals in crisis, a small amount of effort leads to a maximum amount of lasting response, then whatever else may be required to test such provocative hypotheses, relevant life events must be unambiguously sortable as either crisis or not crisis. Thus it become obvious that the success of our efforts in attempts to intervene and influence the outcome of such life experiences will be partially dependent on the adequacy of this fundamental definition.

Yet, even a most cursory review of the research literature makes it clear that this kind of discrimination may not now be possible and that the crisis concept continues to be defined in many ways which partially overlap but by no means converge on a common, simple and unitary definition.

Although somewhat diverse definitions have been offered the following quotations may be considered as representative:

> "A crisis is a threat, a challenge, a strain on the attention, a call to new action. Yet it need not always be acute or extreme. Of course a crisis may be so serious as to kill the organism or destroy the group or it may result in failure or deterioration. But crisis, as I am employing the term, is not to be regarded as habitually violent. It is simply a disturbance of habit, and it may be no more than an incident, a stimulation, a suggestion ... whether the behaviour is organising or disorganising depends upon the point of view; that which is disorganising from the standpoint of traditional harms may have the germs of a new type of organisation, a new definition of the situation which in turn may be accepted and become part of the culture." (Thomas, 1909, p.18)

The definition offered by Thomas could be said to reflect the views of the sociologists but its special significance lies in the fact that it contains one of the earliest references to the potential for positive change as a result of crisis. For Thomas, the significance of crisis lay in the fact that it acts as a catalyst in personal and social development, disturbing old habits, evoking new responses and becoming a major factor in charting new developments.

La Pierre states that:

> "No circumstances, however unusual, is a crisis unless it is so defined by human beings. The individual involved must be aware of the danger which is present or he must believe that danger is present." (La Pierre, Collective Behaviour, cited in Hertzler, 1940, p.159)

On the surface what this statement appears to be indicating is that it should be quite clear that one is not threatened by demands which he perceives himself to be capable of handling without undue expenditure of resources but in fact it hits at the very heart of the still ongoing controversy dealing with the question of what constitutes a "crisis" for any given individual. Although, few will reject the extremely simple idea (yet until recently far from widely understood) that an experience that is stressful or creates a crisis for one person may not do so for another, this "subjective" character of crisis remains as one of the major obstacles confronting any effort to isolate the individuals in such situations. Many writers would argue that crisis is an essentially subjective concept because any trivial incident can provoke a crisis "if" an individual defines it as threatening. Others point out that some life events tend to be universally stressful and that it is possible to select empirically some situations which are nearly always crisis producing, such as the death of a spouse or serious illness. Darbonne (1968) states that certain external events or hazardous situations tend to produce crisis in the majority of cases so that the individual, subjective nature of crisis is not an insoluble problem when studying these types of events. Nevertheless, many feel that a clear demarcation must be made between disastrous crisis-like events and psychological crisis, they caution against an over-simplified definition of crisis

purely in terms of specific events since there are individual differences in vulnerability to the same event. Moreover, we know that not only do people perceive the same external situation in different ways, but that the impact of a given external situation upon a person is mediated by the psychological, social and cultural resources at his disposal. One could almost say that one man's crisis is another man's thrill. The second part of La Pierre's definition places great emphasis on the concept of "subjective awareness" of the danger or situation. This implies that the crucial element in the identification of the crisis-state appears to be a stressful precipitating event of which the individual is "aware" and as such it could raise a question - is a reaction sequence viewed as a crisis if there is no awareness of a precipitating event either by the individual himself or by those in his environment? A study by Bloom (1963) deals rather vigourously with such definitional aspects of the crisis concept as discussed above and his inquiry is of special significance in that it constitutes the only attempt to derive a definition of crisis from an experimental study of its empirical usage. This study will be discussed in greater detail in another section of this thesis.

Thomas Eliot, one of the earliest students of family crisis provides us with the following definition of the crisis concept:

> "A stage in any given interactional process where a person or a group is involved in a problem which has proved insoluble by whatever habits, customs or routine practices have been depended upon, and attention is suddenly focussed upon the impasse ... the competition or thwarting of motives, goals, habits and attitudes, or roles, creates bodily tensions demanding intelligent choice, direction by the ego, and conscious mobilisation of accessible resources to resolve the tension." (Eliot, 1948, p.617)

This definition is very much in line with the symbolic - interation view of a "fit" between a person and his environment held by the sociologists and discussed in the earlier section of this thesis.

Since most discussions of crisis involve reference to problem-solving activities, some theorists have stressed the role of information in crisis resolution. Williams (1957) whose work dealt with people's reactions to mass disaster, defines a crisis in the following manner:

> "A crisis is a situation in which the actor faces the necessity of making the appropriate choice of action in order to avoid or minimise severe punishment." (Williams, 1957, p.16)

He suggests that the general function of communication in a crisis situation is to provide the "actor" with information which will enable him to make such appropriate choice of action.

Julian Taplin (1971) proposes an alignment of crisis notions with the perspective of general psychology's cognitive theory, with special emphasis on information processing. Crisis in this approach is defined as a breakdown in thinking through a physical or psychological "overload". At the peak of the crisis, too much dissonant information prevents the usual planning and executive processes from functioning normally. Once the peak is passed, any strategies, both those leading to good or those to bad outcomes, result in the restoration process, with a consequent decreased sensitivity to intervention.

In 1948, Lindemann and Caplan established a community mental health program in Harvard area, the Wellesley Human Relations Service (Caplan, 1964), where they implemented their crisis intervention ideas. Their basic hypothesis was that, when individuals are confronted with emotional hazards, there are adaptive and maladaptive methods of attempting to cope with the problem. These methods have a sizeable effect on later adjustment and ability to cope. While the original crisis concept has had some modification and expansion over the intervening years current thinking remains along the lines suggested by Lindemann and Caplan. Gerald Caplan, from the broad viewpoint of preventive psychiatry, has written extensively about emotional crisis and their effects on individuals and groups. He refers to crisis as "an upset in the steady state", but more specifically he defines crisis as:

> "A state of emotional ill health in an individual is preceded at sometime or another in the past by a significant period of disturbance of his previous equilibrium. The person passes through a period of emotional upset which is not in itself a period of emotional illness but which leads eventually to a new state which may be the equilibrium of ill health rather than health. Moreover, this crisis, this upset in the internal balance of forces within the individual, is usually precipitated by and is the reaction to a disturbance in the field of forces by which he is surrounded." (Caplan, 1955)

> "A more or less protracted period of emotional upset. The crisis is produced by the individual facing an important problem which he cannot solve during that period. It is associated with rise in inner tension, signs of unpleasant emotional feeling and disorganisation of his functioning." (Caplan, 1958)

> "Crisis is a state provoked when a person faces an obstacle to important life goals that is, for a time insurmountable through the utilisation of customary methods of problem-solving. A period of disorganisation ensues, a period of upset, during which many different abortive attempts at solution are made. Eventually some kind of adaptation is achieved which may or may not be in the best interest of that person and his fellows." (Caplan, 1961)

> "Periods of acute psychological upset, lasting one to five weeks - not signs of mental disorder in themselves, but the manifestations of adjustment and adaptation struggles in the face of a temporarily insoluble problem. They have been novel situations that the individual had not been able to handle quickly with his existing coping and defense mechanisms ... this results in states of temporary disequilibrium in the relatively smooth trajectory of development. The problems are serious and unavoidable ... As adjustment and adaptation struggles, they present both an opportunity for personality growth and the danger of increased vulnerability to mental disorder, the outcome depending to a degree on how the situation is handled." (Caplan, 1964)

Thus "crises" are seen by Caplan as critical turning points in the life cycle in which the individual either increases his repertoire of reality-based adaptive problem-solving techniques or else a step towards non-reality-based maladaptive problem-solving techniques - i.e. mental disorder. For Caplan, crisis refers to the person's emotional (physiological and psychological) reaction to the hazardous situation, not the situation itself. In other words, crisis represents both a danger to and an opportunity for ego integration and the main emphasis is placed on the influence of intrapersonal dynamics on crisis outcome.

Current uses of the term "crisis" provides us with a number of overlapping definitions, a problem which could be viewed as a dilemma limiting both theoretical statements and empirical studies. For many researchers the incidence of the crisis phenomenon is identified by the occurrence of a specific stressful event, e.g. death of a loved one, surgery, birth of premature baby. Such experimenters assumed that the common stressor precipitate a crisis for every victim and as such "oversimplified" the definition of crisis purely in terms of specific events. Through studying of such external events or hazardous situations that produce crisis in the majority of individuals, they reason that, one can study those

who do not feel the challenge and who experience no discomfort as well as those who are in crisis. They feel that in noting variations in response to the same situations they have an opportunity to locate those aspects of approaches and behavioural repertoires that lead to crisis and those that make the situation only an occasion for further progress and mastery. They were convinced that, if they could chart the route by which some people manage to weather the same stressful situation successfully and the route whereby others fail, they would have a powerful weapon forisolating those "at risk" of unsuccessful crisis resolution and help them to take the healthy path. Such efforts required a study of cohorts of large numbers of people experiencing the same situation or event and to date there are a number of studies which show relative success in predicting the quality of outcome for the individuals involved. Such work has served to support the notion that specific limited patterns of response are related to specific crisis situations and that some of these patterns can be identified with our present knowledge and techniques - a number of such investigations will be discussed in the next section of this thesis.

This author, for one, will not argue that frequently crisis implies the presence of a certain class of situation or situations involving certain classes of stimulus poperties, and for reasons outlined above it is easy to see why such "situational" approaches to crisis have a special appeal to many students of this concept. However, it would be obvious to many that such approach incurs several problems and many would caution against such an oversimplified definition of crisis purely in terms of specific events. There is the question of specifying just what kinds of situations and their properties make

for "crisis" situations. There is the further question, one which plagues crisis theory and research, of individual differences in response to the presumably same crisis-inducing situations. If the presence of crisis is to be defined solely on the basis of properties of the situation without reference to the individual who is undergoing the presumed crisis, then we will have to accept a broad range of reactions as outcomes or effects of crisis situations. Furthermore, "situational-based" definitions with individual differences in responses, require a means for calibrating situational properties in order to establish quantitatively the degree of "crisis" in different situations. Without such calibration, it will be very difficult to develop a situational-based definition of crisis that unifies a range of types of situations other than arbitrarily and will probably encourage a development of separate crisis formulations for each distinct class of situations.

Closely related to the above problem is the danger of defining crisis in terms of either its outcome or degree of disturbance. Perhaps the most basic element of many crisis definitions involves the specification of a class or classes of "response" which will be taken as evidence that the organism is or recently has been under crisis conditions. A definition of crisis which relies completely on occurrence of the response syndrome is equally unsatisfactory as the "situational-based" one. The "response" approach has at least three basic weaknesses. First, if any situation that results in a particular response pattern is to be considered a crisis-inducing situation, then we may find all sorts of conditions included under the crisis umbrella, which on other grounds one might not wish to consider a crisis situation. Secondly,

the same response pattern may arise from different situations because it can be produced through entirely different processes, but the meanings, particularly the psychological meanings, of those situations can be entirely different. The third weakness of the "response" pattern definition of crisis arises because all symptoms in the syndrome may not always go together.

In line with many methodological approaches in behavioural science, where one strikes such a polarisation in orientation or definition of a phenomenon and the word is usually out that an "interactional" approach is needed, crisis theorists and researchers quickly concluded that the debate over the relative importance of risk events or situations versus mode of response was a pseudo issue. That is, they suggested a redefinition which would at once allow for both the individual experience of the reporting person as well as the weighting factors of hazard and risk probability - the personal idiosyncratic state and the public partially-predictable one. They began to specify associations between risk event and personal reactions, that is, the probability that the crisis would arise from the combination of hazardous events and personal vulnerability. Thus crisis is defined as a complex "interaction" depending on a precipitating stressful event, the individual's perception of that event as threatening, the success or failure of his available problem-solving behaviours, and the onset of increased tension creating an urgency for prompt restoration to previous steady state. Such formulation accounts for the event, the labelling (subjective assessment) of it, the resources available to the individual and the range of responses as a result of such interaction.

D. Conclusion

So far the concept of crisis has been reviewed with emphasis on its evolution and empirical attempts to anchor it in both psychological and social situation models. It is hoped that such review has done justice to the unifying function of the concept in bringing together several applied disciplines - psychiatry, sociology, psychology and social work - as well as to its central role in the emergent theory of community mental health.

With regard to the definition of the crisis phenomenon, it is important to recognise that the concept of crisis is not a rigorous scientific construct with "hypothetic-deductive" power, but rather is a heuristic device to provide a framework within which to study behaviour (in particular the emotional disturbance) from diverse perspectives simultaneously. Extracting common factors from the quotations of crisis definitions presented in this section, the essential features of an emotional crisis would seem to embody the following:

a) the stressful event poses a problem which is by definition insoluble in the immediate future;

b) the problem overtaxes the psychological resources of the individual, since it is beyond his traditional problem-solving methods;

c) the situation is perceived as a threat or danger to the life goals of the person; and

d) the crisis period is characterised by tension which mounts to a peak and then falls.

Additionally, Bloom (1963) and Miller and Iscoe (1963) noted a consensus in the literature about the definition of crisis. This consensus corresponds closely to the four necessary criteria stated above. Bloom summarised his findings as follows:

> "Review of the relevant literature suggests that the crucial elements in the identification of the crisis state seem to be (a) a stressful precipitating event of which the individual is aware; (b) significant subsequent rapid cognitive and affective disruption unusual for that particular individual; and (c) duration of the disruption of at least several days."

Miller and Iscoe attempt to define the five essential features of crisis as follows:

1. 'The time factor.

   There is agreement that it is acute rather than chronic and ranges from very brief periods of time to longer periods which are not yet clearly defined. A special case is the treatment by Caplan in which the crisis situation exists from a minimum of about a week to a maximum of six to eight weeks.

2. Marked changes in behaviour.

   The individual or group is obviously less effective than usual. Activity is related to an attempt to discharge inner tensions, there are successive trial and error abortive attempts to solve the problems without apparent success, constructive behaviour decreases and frustration mounts.

3. Subjective aspects.

The person experiences feelings of helplessness and ineffectiveness in the face of what appears to be insoluble problems. There is a perception of threat of danger to important life goals of the individual and this is accompanied frequently by anxiety, fear, guilt or defensive reactions.

4. Relativistic aspects.

Although there are common crisis situations, the individual's perception of threat and of a crisis is unique to him and there is some recognition that what constitutes a crisis to one individual or group does not constitute it for another group.

5. Organismic tension.

The person in crisis will experience generalised physical tension which may be expressed in a variety of symptoms including those commonly associated with anxiety. These reactions may be immediate and temporary or they may constitute a long term adjustment to the crisis situation itself.

Although the definition attempted by Miller and Iscoe seems to emphasise the response side of the picture rather than the antecedents, implical, however, is the cognition by the individual of an extreme danger, of conditions whose confrontation is judged to be harmful.

Admittedly, the criteria for determining what constitutes a crisis are not precise, however, the two basic elements that define the nature of the crisis are clearly illustrated by the following passage:

"In the ideographs of the Chinese language two characters are used to write the single word crisis - one is the character for danger and the other is the character for opportunity."

CHAPTER III: CRISIS THEORY

The main purpose of this chapter is to discuss a body of theory common to the growing body of theoretical formulations, reports of therapeutic innovations and research studies that have been drawn together loosely under the rubric of "crisis theory". A set of theoretical concepts appropriate for analysing crisis reaction will be put forward with brief summaries of pertinent research findings.

In the literature on crisis it is not difficult to find numerous articles and reports of studies that concern themselves with review of the concept of crisis, practice and research part of the concept or both, and as such the author had a considerable struggle over what literature to include. One problem is that, because the topic of crisis lies across so many other psychological and social subjects, tangential literature of relevance is very extensive. Thus while it is intended to give the flavour of the field, the studies cited will be considered as representative, not exhaustive. They were selected either because they must be regarded as classic works in a young discipline or because they came to grips with issues that were considered important in present research.

When one examines the range of publications whether theoretical in nature or actual reports of experimental studies in the field of crisis literature, the field shows a kind of methodological and theoretical pluralism that tends to occur in most inter-disciplinary fields. The research published under such "crisis headings" is largely parochial, fragmented and divergent and even where this is

not the case, it is difficult to find contributions which are constructively synthetic rather than merely eclectic. Many students of the concept lament that although an extensive literature on crisis now exists, they were unable to find an explicit therapeutic approach to an individual in crisis based on a detailed theoretical conceptualisation and as a result of this, many embark on yet another exercise to offer a "complete theory of psychological crisis". Unfortunately, such attempts often result in a situation that parallels very closely one of Freud's comments in his lectures on ego psychology - "It will be difficult to escape what is universally known ... it will rather be a question of new ways of looking at things and new ways of arranging them than of new discoveries."

In order to accumulate an integrated body of knowledge in any field of scientific inquiry we must have both stability of findings over studies and generality of findings beyond any specific method within a rubric of a broad and comprehensive theory. Given a theory sufficiently broad so as to encompass all aspects of the problem and sufficiently operational so as to guide the development of manipulation and measurement operations and predicted relationships, results of any one study can then be compared to the results of other studies as each can be placed within a structured network of concepts and relations. In literature of crisis the reader will not find an overarching or unifying theory of crisis phenomena, for no such theory yet exists. Although there exists a number of complementary conceptual models in the field of crisis inquiry, the parameters are probably too broad and too amorphous to grant it recognition as a systematic theory in the sense of being an internally consistent body

of verified hypotheses. However, enough conclusions have been crystallised to recognise the emergency of a discernible framework within which to examine crisis situations, as well as a body of guidelines and techniques for intervention at such times. The dynamics involved in crisis concept are clearly complex and in the absence of great knowledge as to the etiology of mental health and psychological maldevelopment, any conceptual framework will be a temporary expedient adopted for pragmatic purposes. As this is the case for all sciences, whether exact and highly developed or primitive and inexact, we should not be too troubled.

Our knowledge of the crisis concept stemmed from early clinical impressions and many theoretical formulations are borne out by clinical experience of dealing with troubled individuals. Such clinical impressions provided the backbone for the more theoretical formulation in later stages. Unfortunately, despite the insight and suggestive value of some of such observational and descriptive studies - they do fail to pass the minimal requirements of scientific inquiry. Rudimentary scientific procedure - sampling, controls etc - were nearly always violated. Nevertheless, it would not be easy to disperse quickly with decades of observations by thoughtful and intelligent men and although at best this class of evidence remains suggestive they could be viewed as being parallel to the "natural history" phase of the development of any area of scientific concern. Such efforts can be exemplified by Darwin's observation in the field, with its essence being the open-ended analysis and descriptions of phenomena to discover variables which deductively seems to be of importance. Granted that without such original observations there can often be no assurance that variables more formally investigated

have been realistically and wisely chosen and that the chief function of investigations of this type is to set the stage for the formal controlled study of the clues and inferences which they produce, nevertheless the more scientifically oriented workers are concerned with the fact that it is very easy in reporting such uncontrolled, descriptive observations or studies, to jump to unjustified conclusions. If this is the case in the field of crisis formulations, then what lies ahead of the so-called "scientific" sceptics is the task of converting impressions into hypotheses and clinical reports into experimental research in order to show that the old coping mechanisms of exploratory research, theorizing and clinical case reports are not in themselves contributing to the health growth of the concept.

While crisis theory is essentially eclectic in nature, certain basic assumptions, hypotheses and concepts seem to form the core approach. The concept of "change in steady state" is fundamental to crisis theory. It is also assumed that whenever a change in state takes place the need arises for the individual to restructure his ways of looking at the world and his plans for living in it. Whether we construe the change as a gain or a loss it is likely to require effort and whether the situation is seen as gain or loss one is tempted to think that the crucial factor may be the way in which the individual copes with the process of change. But what is it that changes? In the first place the change is likely to take place in the part of the world which impinges upon the self. This is what Kurt Lewin (1935) has called "the life space" and which consists of those parts of the environment with which the self interacts and in relation to which behaviour is organised. Changes in the life space

are important or unimportant depending upon their influence upon the assumptions which we make about the world. For instance, sudden loss of vision involves a change in the life space which is important or unimportant depending upon whether the individual believes himself to have gone blind or to have voluntarily closed his eyes. This "assumptive world" is a subjective assessment of the reality. The assumptive world is the only world we know and it includes everything we know or think we know. It includes our interpretation of the past and our expectations of the future and plan. Any or all of these may need to change as a result of changes in the life space. The life space is constantly changing, novel stimuli, fresh combinations of events, unique communications from others are received and assimilated. Some of these changes fulfil expectations and require little or no change in the assumptive world, others necessitate a major restructuring of that world, the abandonment of one set of assumptions and the development of a fresh set to enable the individual to cope with the new altered space. Crisis parallel such major changes in life space which are serious in their effects, which take place over a relatively short period of time and which affect large areas of the assumptive world. An example will help to illustrate some aspects of this basic assumption of crisis formulation. Loss of a job deprives a man of a place of work, the company of workmates and a source of income - it is an objective event which produces several changes in his life space. What corresponding changes can be expected in the assumptive world? Clearly assumptions about the way each day must be spent will change, assumptions about the source of money and security will change, and the individual's faith in his own capacity to work effectively and to earn are also likely to change, his views of the world as a safe,

secure place will change, his expectations of his future and that of his family will change and so on. Thus this altered assumptive world will cause him to introduce further changes in his life space, to set up a cycle of internal and external changes aimed at improving the fit between himself and his environment.

Such course of adjustment to change or crisis involves the "quest of coping". Coping is so common a term in everyday speech that we use is loosely. Because it involves so many everyday behaviours, it has been little observed, examined or analysed as a process. Yet it is a process of central interest to anyone in the helping professions, simply because it is at the point of inability to cope that people reach out for or are sent to get help - they say "Help me to cope". Inability to cope may be acute and transient or chronic and entrenched; crisis situations are characteristic of the former. The reasons for the inability to cope may be open and obvious, such as actual deficits of resources or instruments in a person's environment. They may lie in the person's own endowments - in deficits, disturbances or distortions in the cognitive-affective system. Whatever the locus of difficulty, whatever the nature of the problem, the person is in need of learning some different ways of solving the problem and most problem-solving goes forward through the conscious effort to try out new or modified ways of behaviour, thinking and feeling. Coping is a process in which we are engaged from birth onwards, it is a person's effort to deal with some new and often problematic situation or to deal in some new way with an old problem. Its purpose is mastery or problem solving at best; at the least, it serves to reduce tension and ameliorate the problem.

The term "coping capacity" or "coping potential" is frequently used in discussions of crisis theory and practice and it is generally accepted as a concept of key significance. The crisis itself represents a reduction in the ability to cope. Successful coping, in turn, represents the ability to ward off by all means, the occurrence of crisis condition or positive resolution of such situations. Also, once a crisis condition has set it, we speak of crisis intervention whose task is to revive and strengthen coping abilities.

The clinician will recognise that "coping potential" in this context bears a clear relation to the familiar concepts of "ego strength" and "ego resources" as used in therapeutic assessments. Considerable controversy shrouds the notion of "ego strength". It is difficult to define, and even more difficult to translate into behavioural equivalents. The substitution of the term "coping potential" in crisis terminology is not designed to replace one vague abstraction with another equally vague; it is rather an attempt to link the overall concept of the rational, reality-contact functions of the personality, as directly as possible, with observable action patterns. "Coping potential" is defined here as those behavioural functions enabling the organism to maintain himself in his environment continuously and preserving his ability to do so. The term "coping mechanism" should be used only when a preferably describable set of events which predictably would lead to disorganisation, conflict, reduction and/or loss of adjustment ability, is reacted to with behaviour patterns aimed at influencing the internal and external environment in such a way as to insure an avoidance of or an elimination of a developing and/or progressing crisis condition.

An individual in crisis reacts to an external threat with fear and anxiety which interferes with his perceptual-organisational ability which in turn prevents further investigation of the stimulus. This provokes more discomfort and anxiety and so in an ever widening vicious circle of events a crisis is in the making. The individual capacity to break the spiral of developments and incur the return of his problem-solving capabilities represents his "coping abilities". Finally, one cannot overestimate the importance of social support in such quest of coping, and recognise that social networks not only provide support but they also can be extremely detrimental in adaptation by interfering with coping efforts.

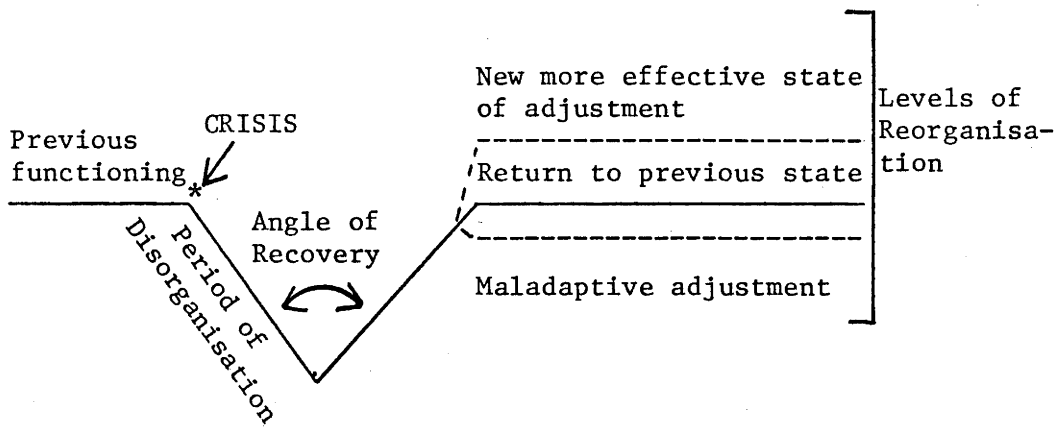
Much crisis research has attempted to map crisis inducing situations to consequences without adequately explaining the coping process by which the organism deals with the impact of the crisis. Such research is, of course, useful in developing our knowledge of the crisis phenomena but it is not sufficient. Studies which directly focus on the coping process - to investigate a variety of coping techniques, the circumstances under which they are or can be utilised, and the range of consequences of their use - are both few in number and vital in their contribution to our knowledge of human crisis. Before discussing some of the relevant works in this area it may be useful to begin by making certain logical distinctions to clarify and structure the topic of coping. The first distinction to be made is a temporal one. Coping behaviour may take place before, during or after the occurrence of a crisis-inducing situation. Secondly, and at whatever stage, coping behaviour may be directed towards preventing or removing the "crisis" condition, or towards

preventing or undoing the consequences of such conditions. In a crisis situation it is also necessary to make a third categorisation of coping techniques in terms of a healthy-unhealthy resolution. Such a normative distinction, however, turns out to be more complicated than merely a dichotomy. What also must be made clear is that it involves value premises. A fourth categorisation of coping behaviour is the extent to which the organism uses multiple coping techniques simultaneously or in succession rather than just a single coping method.

One similarity that many theoretical approaches share when it comes to understanding of crisis phenomena lies in the fact that they regard reaction to crisis as a release of a series of increasingly expensive mechanisms of defence. In this sense, the mechanisms or tactics of defence are initiated serially as preliminary measures fail to handle the demands evoked by the stressor. Eventually crisis is alleviated by the success of some defence in the hierarchy of defence tactics or the cessation of stress conditions owing to environmental factors. A good parallel or analogy to the concept of serially initiated responses to crisis is the examples of a military defence of a state. Here too, a minor threat might be handled initially by a small expeditionary force or military aid, neither of which is very disturbing to the life of the defending nation. Then, if the threat is not alleviated a further commitment is made. This commitment grows. More personnel and greater resources are assigned. Finally, if the threat still continues extremely expensive defences are brought into play and casualties rise. What makes this analogy appropriate to the context of crisis behaviour is the fact that, whether these sequences end in victory or defeat,

whether they are adaptive or maladaptive, objectively valid or subjectively misleading, is not always clear or certain. Sometimes only the course of events will tell. Moreover, what this example illustrates clearly is that both courses (victory or defeat, adaptive crisis work or maladaptive crisis work) demand an increasing commitment of resources, both are increasingly expensive and both involve step-function shifts in defensive posture. At the same time, it is clear that both processes are not obviously identical and if there are similarities then they are true to only certain characteristics of a sequence. Thus, an understanding of response patterns in crisis behaviour requires the study not only of the traditionally enumerated stages in crisis phenomena but also of the way in which the preceding step alters the situation and thus the nature of the succeeding step. Perhaps the very sequence of reactions that get the individual in crisis to a certain point develops committed positions and complexities that are as difficult to handle as the core problem itself.

Another concept implicit in many theoretical approaches to crisis phenomena is the segmented description of the crisis experience. A recurring theme in the empirical descriptions of the crisis syndrome is the idea that crisis go through characteristic stages of development. Hill (1958) likens the progress of family crisis to a "roller coaster" - crisis - disorganisation - recovery and reorganisation, model which could be best illustrated diagramatically in the following manner:



Other writers have included the pre-crisis period among the stages of crisis - prelude - warning - impact - inventory - recovery, especially for those crisis which can be anticipated: for example, Janis' (1958) study of the relationship between pre-operative preparation and anxiety and post-operative adjustment.

A more detailed "sequential-stage" analysis of the above segments in the life cycle of a crisis was presented by Caplan (1964).

1. An initial phase in which an individual, responding to the problem and the tension generated thereby, attempts to solve the problem by his usual problem-solving techniques.

2. If unsuccessful, a second phase is entered. Tension increases producing emotional upset. Feelings of anxiety, guilt, shame, fear and helplessness may be experienced. Ineffective and disorganised functioning occur. There may be successive abortive trial and error attempts to solve the problem. An individual may seek to discharge tension through activity unrelated to solving the problem, e.g. getting drunk.

3. With the continued failure to solve, rising tension acts to stimulate renewed problem-solving efforts and resources. The problem may be re-examined and redefined to be amenable to a solution. Novel situations may be tried. During this phase, the problem may be solved. The solution may involve acceptance of previously unacceptable aspects of the problem. However solved, homeostasis is restored, possibly at a higher level of functioning than before.

4. Lack of solution and continued tension characterises a fourth phase with clinical evidence of major disorganisation. If this is the case the individual is then seen as entering the stage of major disorganisation with serious consequences to his mental wellbeing.

Once can clearly see the advantage of sequential-stage analysis, so often employed in the understanding of the crisis experience. It allows the investigator to break down his subject matter into more manageable parts, to relate these parts to one another in a relatively systematic way, and in general it bestows a semblance of analytic order on the chaos of contradictory reports and observations that usually emerge from the crisis experience.

Epidemiological studies of the various crisis have begun to delineate their natural histories, dominant patterning of sequential events, providing a foundation for the determination of appropriate and maladaptive solutions to the problem. A number of descriptive studies have observed the crisis work of individuals who were assumed to be in conditions constituting a crisis. The majority of these

descriptive studies focused solely on crisis work leading to maladaptive crisis resolution; a few studies compared maladaptive and adaptive modes of crisis work.

One of the first studies from which others have derived their conceptualisation of crisis and crisis resolution was Lindemann's (1944) study of acute grief reactions following the Coconut Grove fire. Through the Coconut Grove disaster Lindemann had a unique opportunity to make an intensive study of survivors and other bereaved. With the additional experience of wartime deaths and separation, he made his classic observations on the process of mourning or "grief work". He described acute grief as a distinct syndrome with regular psychological and somatic symptomatology, constituting an active process in which the work of grief had to be undertaken in order to achieve a satisfactory resolution. He recognised that the syndrome might appear immediately after the loss, or be delayed or exaggerated or apparently altogether absent so that in place of the typical syndrome there might appear a distorted picture representing a potentially maladaptive resolution. He asserted that by the use of appropriate techniques these "pathological" syndromes could be successfully transformed into a normal grief reaction with appropriate resolution. He emphasised the possibility of early recognition of such distorted patterns, and claimed that resolution could be achieved through enabling the patient to pass through the normal mourning process by manipulating his supportive network and sharing in his grief work. He insisted that it was not necessary to understand the psychodynamics or other reasons why a distorted pattern of mourning had occurred and that exploration was in fact contraindicated at this stage. He finally

observed that failure to perform adaptive grief work consisting of accepting the reality of the loss and experiencing the appropriate emotions, frequently led to drastic decrements in psycho-social adjustment and the onset of psychosomatic symptoms. Although primarily concerned with bereavement through death of a loved one, Lindemann also recognised that other forms of separation, loss of other valued objects, loss of integrity or failure of achievement might produce similar reactions. Since Lindemann's paper there have been a number of studies of normal and pathological response to the crisis of bereavement, and the increased morbidity of this period is well established (Kraus and Lilienfeld, 1959; Parkes, 1965; Parkes et al, 1968; Maddison and Walker, 1957; Maddison, 1968).

Although Lindemann has applied his theoretical concept primarily to the process of recovery from the death of a loved person, there are many indications from more contemporary studies of psychological stress that essentially the same type of working through goes on in physically ill people, to quote but one example, when they are grieving over the loss of their former state of physical wellbeing or the loss of specific physical capabilities. Shands (1955) has described the characteristic phases and changes in attitude observed in cancer patients. When a person is first told that he has a malignancy, his initial reaction usually consists of dazed emotional shock, apathetic numbness, feelings of depersonalisation and inhibition of action. He feels empty and doomed. After a short time, however, a second phase begins, characterised by intense preoccupation with the illness, combined with unsuccessful attempts to alleviate emotional tension by projecting the blame onto doctors, nurses or others. During this phase the patient strives to deny the

obvious implications of the disease. These responses are then followed by a third phase in which the person "grieves" over his condition and then gradually readapts, overcoming the sense of emptiness and is open to communications with others. By communication is meant more specifically that the patient no longer shies away from people. He has now found a way of obtaining satisfaction from his interaction not only with doctors and nurses but also with his family, friends and fellow patients. This reorientation is regarded as "adaptive" since it enables the patient to take an interest in the social world again, to seek and obtain consolation from others, to plan his actions in a realistic way that maximises his chances for survival, and to take account of various limitations imposed by his illness. Shands further points out that a warm social environment and the availability of sympathetic listeners can greatly facilitate the "adaptive" reorientation process through provision of appropriate role models with whom the patient can identify.

Normal and pathological aspects of crisis concerning premature birth have been described in a number of studies with some degree of predictive power to enable the researchers to differentiate the "poor" copers from the "good" ones. Kaplan and Mason (1960) and Caplan (1960) identified families in which a premature baby had been born and studied both the mother and the family as crisis victims. Caplan's study was the more thorough and, in addition, offered a comparison between families in which adaptive and maladaptive crisis resolutions were achieved.

In Caplan's study a research team conducted weekly interviews in the homes of families into which a premature child had been born. The interviewing followed the family from the birth of the child until it had been at home for six to eight weeks. The mother was made the focus of observation, and the reactions of the other family members were noted only as they related to the mother's efforts to resolve her crisis. Ten cases were chosen in which two psychiatrists agreed that the resolution of the crisis was healthy or unhealthy (adaptive or maladaptive). The criteria for these judgements was the quality of the dyadic relationships among family members two months after the baby's birth as compared to retrospective accounts of these relationships prior to birth. Four prototypic healthy families were contrasted with six prototypic unhealthy families.

The families which made healthy resolutions constantly and consciously sought for factual information about prematurity. By so doing, they were able to formulate reality-based expectations of danger and hope. The unhealthy resolution families did not try to elicit factual predictions of the future and faced the future indirectly, often with active, fantasy-based expectations. The prematurity was interpreted as due to the badness of oneself or of others, and for this reason, collaboration and abreaction with others was avoided. In contrast to this, feelings were dealt with consciously by the adaptive families and were appropriate to the realities of the prematurity. There was open expression of feeling and inhibition of expression occurred only briefly at peak moments of danger. Of the maladaptive group, Caplan wrote:

> "The suppression, denial, avoidance or overcompensation of negative feelings is almost continuous during the crisis. During brief periods of break-through of feelings, rational thinking and routine activity are disorganised ... The only negative feeling which is permitted is blaming others." (Caplan, 1960, p.371)

Persons in the maladaptive resolution group did show a rise in non-specific tension despite their efforts to deny any discomfort and to appear cheerful at all times. The non-specific tension took the form of fatigue, meaningless overactivity unrelated to resolution of the problem at hand, and neuro-muscular tension. The healthy parent group, on the other hand, actively sought help from one another and from the environment (the community, the physician). This help was both task-oriented and directed towards abreaction of feeling. When help was offered, it was willingly accepted in most cases. Instances of rejection of help, attempts of denial, or withdrawal, were counteracted by the significant others. In the unhealthy resolution families, the offer of help was often missing and was most often rejected when made. Rarely would the mother actively seek help from the family or environment; her denial and withdrawal were encouraged.

Kaplan and Mason (1960) observed mothers whose children survived premature birth. Their observations began with the first premature signs of labor and continue through the period of the child's hospitalisation - often several weeks to several months after delivery. Their description of maladaptive crisis work closely paralleled Caplan's.

During labor the women often denied that delivery was imminent even though many had been cautioned well in advance of the possibility of prematurity. After delivery they could not make use of the

reassuring information available to them from the doctor or from their own interactions with the newborn child. Many women refused to assume their normal maternal duties towards the infant, insisting in spite of clear evidence to the contrary, that the child would soon die.

Kaplan and Mason suggested that there were several necessary cognitive tasks required for successful crisis resolution. Like Caplan and Lindemann they stressed the need for reality testing, the formation of appropriate expectations for the future and the open catharsis of appropriate emotions. In addition, they felt the crisis victim should be encouraged to assume (or to reassume) the normal role behaviour which may have been disrupted by the crisis events.

Caplan referred to Janis' (1958) investigations of the adaptational efforts of surgical patients and the clues such work provided to a working-through process that can be initiated before actual exposure to danger stimuli.

When a threat or impending crisis is predicted, a person may be able to worry in advance. This "anticipatory worrying" is quite useful because it relieves the future burden, as long as it is within a controlled range. If it goes overboard, it becomes itself weakening. But if one worries ahead of time at a certain moderate level one prepares himself for the situation when it comes. Not only does the person by anticipatory worrying reduce the later burden, but he can summon external supports in advance, which in turn, will add to his own strength and increase confidence

in handling the problems when they do appear. "Forewarned is forearmed" is a folk-saying and the work of Janis using such concept is of outstanding importance.

Janis (1958, 1965) defines psychological stress as the reaction to a physically dangerous event in which pain, bodily injury or death is anticipated. The way an individual psychologically handles the impending crisis during the pre-impact period is an important determinant for the outcome. Janis postulates that a "work of worry" is essential for successful outcome. This anticipating rehearsal or imaginative construction of future events serves to bind anxiety and later functions to reduce uncertainty of crisis impact.

With the co-operation of the Surgery Department of the Yale Medical School, 23 typical patients on the surgical wards of the Grace-New Haven Hospital were interviewed intensively before and after undergoing major surgery. Hospital records, including the physicians' and nurses' daily notes on each patient's behaviour, were also used. The patients were classified into three categories - high, moderate and low preoperative fear - according to the available interview data and behavioural records concerning their preoperative emotional status. The following conclusions from the case study series were also supported by correlational data from a survey research study conducted with about 200 male adolescents who had undergone a recent surgical procedure.

> "(1) Persons who were <u>extremely fearful</u> before the operation were <u>more</u> likely than others to be <u>anxiety-ridden</u> again afterward, and their excessive fears of body damage were linked with clinical signs of chronic neurotic disturbance.

(2) Persons who displayed a moderate degree of preoperative fear were significantly less likely than others to display any apparent form of emotional disturbance during the stressful period of post operative convalescence.

(3) Persons who showed a relative absence of preoperative fear were more likely than others to display reactions of anger and intense resentment during post operative convalescence."

(Janis, 1965, p.1367)

Thus according to Janis, surgery represents a crisis of some degree for all individuals, and within certain limits, the post operative adjustment can be predicted on the basis of preoperative behaviour. Janis found a relationship between magnitude of preoperative anxiety, the way in which the patient handles his anxiety, and the post operative course of recovery. A curvilinear relationship was postulated between level of anticipatory fear and crisis outcome, with both extreme worry and denial of danger resulting in poor outcomes. Janis observed:

"... patients with a moderate level of fear may be more likely than those with low fear to develop reassuring concepts that take account of (a) the dominant threats to which they will subsequently be exposed, and (b) the danger-reducing aspects of the stress situation, such as the availability of help from protective authority figures. Instead of dismissing the impending operation as a trivial or joking matter, they may be inclined to "seek information" about the threat and to think in terms of mitigating factors ..." (Janis, 1958, pp305-306).

The excessive worrier on the other hand, is motivated to do the necessary work of worrying but is unable to utilise it to formulate realistic estimates of the danger or the possibilities of recovery. Instead, he "remains in a state of hyper vigilance, involving a loss of mental efficiency, lowering of reality-testing capacities and reduced tolerance for subsequent stress" (Janis, 1958, p.410).

Janis also observed that persons indicating no fear of the impending surgery, who confronted the event by joking or asserting its triviality, as well as those highly anxious patients who coped with distracting games and fantasies, had a higher probability of a longer post-operative course of recovery than did individuals with moderate amounts of anxiety.

The work of Janis further serves to support the notion that anticipatory support can be specifically engineered by care taking agents, by a technique, which has been known in mental health circles for some time, which we call "anticipatory guidance". His studies suggested areas for further evaluation of such techniques - e.g. the effects of prior information upon response to the crisis situation, as well as providing concrete knowledge upon which such action can be based.

In contrast to Janis' work and his findings based on observations from purely correlational and descriptive studies, clear-cut evidence is available from a few experimental studies which have tested the effects of giving preparatory information and related staff practices on stress tolerance (Moran, 1963; Egbert, 1964; Levy and McGee, 1975). These studies will be discussed in some detail in the next section of the thesis dealing with "crisis intervention" techniques.

Other descriptive accounts of adaptive and maladaptive crisis work include studies of natural disasters and accounts of acute emotional disorders precipitated by combat. Reviews of these studies are readily available (Farberow, 1967; Baker and Chapman, 1962,

Wolfenstein, 1957). Therefore these studies are noted but not expanded upon in this discussion.

Below is a summary of adaptive and maladaptive crisis work as described by the studies above. Crisis intervention as a therapeutic modality may be defined as an attempt to promote adaptive crisis work and to discourage maladaptive crisis work.

Adaptive crisis work:

Crisis work in adaptive crisis resolution is focused primarily on the stress precipitating the crisis. Alternative solutions are sought through closer examination of the problem at hand. Disturbing affects are acknowledged and given open expression. Adaptive crisis work depends largely on the solicitation of and constructive use of help from other persons. Adaptive crisis work is an abreactive, reality-based co-operative effort.

Maladaptive crisis work:

The focus of attention in maladaptive crisis work appears to be an effort to cope with the disturbing affective components of the crisis. The stressful circumstances are avoided and reality-based problem-solving behaviour is minimally evident. It follows that maladaptive crisis behaviour is characterised by avoidance of and poor utilisation of the assistance of others. Maladaptive crisis work is generally unrealistic (inappropriate to the stressful circumstances), guarded and defensive, and involves efforts to avoid help.

To date Gerald Caplan has probably been most active in pioneering and developing the foundations of the crisis framework, at least

within the mental health field. Caplan (1964) was concerned with the primary prevention of mental illness as one basic element of preventive psychiatry. He hypothesised that the adult who had negotiated the crisis of maturation and achieved a stable homeostatic equilibrium was subject to similar crises precipitated by acute environmental events. Once such a crisis had occurred, Caplan theorised that its resolution could result in a significant shift for the individual on a continuum from mental health to mental illness. In formulating the crisis concept it was Caplan's intent that study of the psychological and psycho-social concomitants of crisis would lead to the identification of procedures which would enhance the individual's capacity to withstand unavoidable environmental stressors. These procedures would make primary prevention of mental illness possible in these instances.

Caplan (1964) has attempted to create a thoeretical system in the light of which numerous observations about behaviour in crisis are seen to conform to a certain order and logic. He describes the crisis model in the following manner. Typically an individual handles problems by bringing into play a variety of problem-solving mechanisms, one of which solves the problem. Before the solution occurs, the person is in a state of tension, which does not become excessive simply because the state is short lived and the person is accustomed to such periods of tension. In crisis, however, the tension is much greater, first because the problem is more significant and, second, because the individual's usual ways of dealing with problems offer no solution. The uncomfortable state in which the individual finds himself is of much longer duration than it is in his usual problem-solving activities and he develops a feeling of

helplessness and ineffectiveness. These feelings are associated with some disorganisation of funtion that may consist either of attempts at discharging inner tension or trial-and-error attempts to solve the problem. Through this behaviour the individual may either develop new methods of dealing with his problem or fail and simply avoid a solution. The new methods of problem-solving developed during crisis are added to his repertoire of behaviour and, if effective, will be of aid in the future. Inability to deal with the problem or a poor solution will inhibit future ability to cope with problems.

More specifically, however, Caplan in an effort to find a theoretical harbour for the growing body of observation of crisis, defined crisis as a disturbance of homeostasis. He conceived of the "normal" state of human functioning as a homeostatic balance between conditions of need defined by physical, psycho-social and socio-cultural demands on the organism and instinctual, learned and environmental means of adapting to or providing supplies for these needs. Acute events or stresses which might upset this homeostasis would include the actual or threatened loss of supplies in one or another of these areas of need or the challenge of the possibility of increased availability of supplies to meet these needs. Ordinarily a stress would be met adequately by the individual's repertoire of problem-solving behaviours. A moderate rise in tension would be alleviated quickly by the successful resolution of the problem. A crisis might develop when the stress is unusually strong or important and when it cannot be resolved by the problem-solving behaviours available to the individual. Caplan defined stressors involved in the etiology of crisis as obstacles to important life goals.

Inherent in Caplan's crisis theory based on the psychodynamic model is the concept of personality as a dynamic equilibrium resulting from crystallisation of past expereience and tending to respond in a manner predictable from that experience, but nonetheless capable of change under an appropriate stimulus. In this sense, the concept of stress as a force or agent which tends to overcome an established equilibrium has been used in the understanding of many problems. As a compelling or urging force tending to change the form of a substance, as used in physics and engineering, the concept of stress has been taken over to express similar compelling or urging forces which change an established pattern or form in structure and function of an organism. According to this approach the normal consistency of pattern or equilibrium is maintained by homeostatic re-equilibrium mechanism, so that temporary deviation from the pattern calls into operation opposing forces to automatically bring the pattern back to its previous state. In other words, the equilibrium might be said to be upset by individual or the system being faced by a force or situation which alters its previous functioning. One might call this a "problem". In a crisis, this process is exaggerated because the problem stimulus is larger and the usual re-equilibrating forces are unsuccessful within the usual time range. In those terms, crisis would occur if any force pushes the functioning of an important system beyond this ability to restore equilibrium through ordinary non-emergency adjustment processes.

Firstly, Caplan's explanatory model concerning crisis behaviour can be translated into a very simple equation:

CRISIS RESPONSE = f (situation x person)

In such model, a state of equilibrium implies a "fit" between a person and his environment and the behavioural characteristics of the individual at a given time are seen as the result of a dynamic relationship between demands placed on the individual by his milieu (physical, psychological,socio-cultural) and his capacities to respond to the demands effectively. Individual and environment variables are viewed as constantly interacting with each other in such a way that their effects are not merely additive but are multiplicative in that a given pattern of behaviour is most likely to be observed if one or more particular constellations of the factors exist. This multiplicative situation may be represented mathematically as:

$$Y_B = f\ (X_I \times X_E)$$

where Y_B = given type of behaviour

X_I = characteristics of the individual

X_E = environmental factor

Here, if either X_I or X_E is absent, Y_B is considered unlikely to occur. However, when both factors are present in such multiplicative case, the probability of Y_B occurring increases much more sharply than in the additive case of $Y_B = f\ (X_I + X_E)$.

The occurrence of crisis in such a context, does not just involve either the characteristics of the individual or of a situation but a dynamic interactive relationship between them - it represents the dynamic interaction between the system of demands and the system of capabilities that in turn produces the observed crisis behaviour in an individual.

However, a much broader paradigm of crisis model would have to include the following five classes of variables in order to offer a more comprehensive picture of a stressful experience and its aftermath:

1. Objective social conditions conducive to precipitating crisis events.

2. Individual perceptions of the event significance for that person.

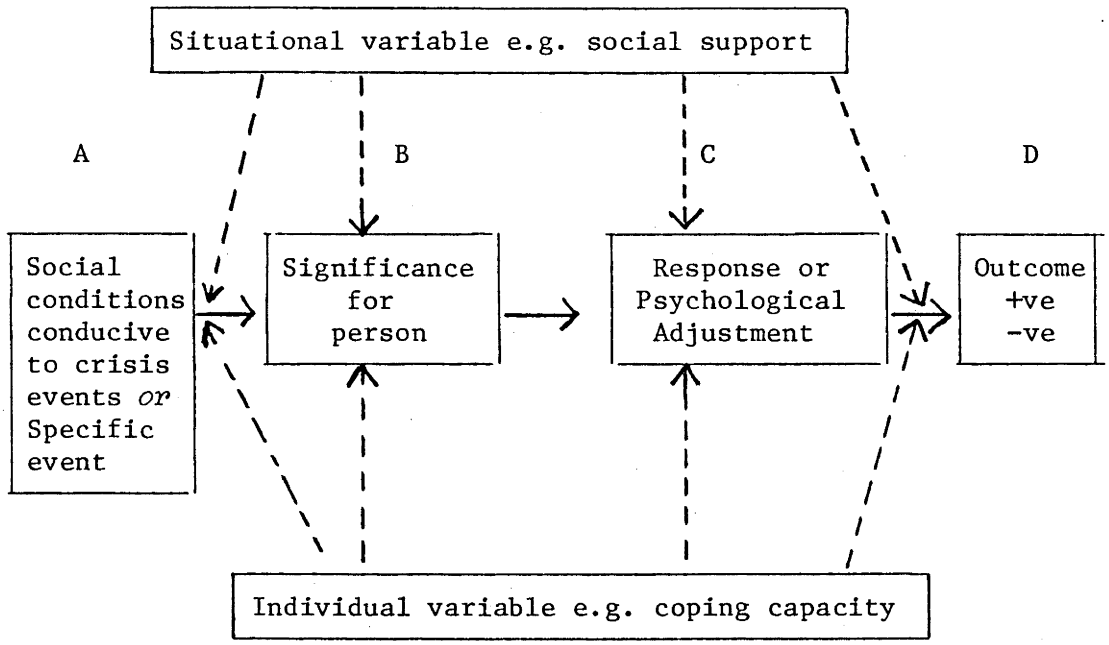
3. Individual response to the event - physiological, cognitive/affective, and behavioural.

4. Outcome - adaptive or maladaptive.

5. Conditioning or balancing factors - individual and situational variables that specify the relationship among the first four sets of factors.

These five major variables involved in a stressful experience and its aftermath can be represented schematically as follows:

E. Balancing or Mediating Factor



E. Balancing or Mediating Factor

The solid arrows indicate hypothesised causal relationships while the dotted arrows coming down from the box labelled "Balancing factor" indicate that social and individual factors influence the nature of these relationships In other words, the dotted arrows indicate that at any sequence of the process there exists an interaction between the balancing variables and the process in predicting what the variables or outcome of the next stage could be. This could be easily illustrated by looking at the first step in the sequence - there exists an objective demand on the person within his environment e.g. retirement, but it is only perceived as a crisis if the person defines it to be so in terms of overtaxing his coping and adjustive mechanisms and most likely in the absence of adequate situational support. Thus one person will perceive this objective reality like retirement as crisis and another will welcome it - the intervening variable here is obviously a factor of the person's psychological needs and social condition.

In order to develop a more comprehensive understanding of the model presented above, it is necessary to examine more fully each of the major variables involves:

A. Hazardous event - the initial force, either an external blow or internal change, which triggers the chain or reactions. Basically, such events can be classified into anticipated or unanticipated ones. Anticipated events are generally of two kinds, the normal developmental critical stages, such as the pre-school or teen years, and the transition points when the individual passes from one stage to another and has to take on new roles, learn new tasks, and adjust to new conditions. Examples of this would be marriage, parenthood or retirement.

Unanticipated events are the unpredictable changes that can occur without warning to everyone, at any stage in life. These can be subdivided into three categories: those involving a loss or impending loss to the person or a significant other, such as separation, desertion, divorce, illness or sudden death; those involving the sudden introduction of a new person into the social orbit, such as the premature birth of a child or the unexepcted return of a family member; or those involving community disasters or disruptions such as fires or hurricanes, or economic catastrophes such as wiping out of neighbourhoods through urban renewal programs or loss of jobs through factory closures.

The Cummings (1966) have offered an alternative typology: events which are "biologically tinged" those which are "environmentally tinged" and those which are "adventitious", attributable to sheer chance.

Thomas McGee (1968) suggests that critical events can be assigned different priorities along a continuum. "Normal developmental crisis such as birth, school entrance and marriage which generally have a low order probability of requiring direct and immediate mental health intervention can be placed at the lower end of such a continuum. Potentially more severe crisis such as the loss of a job combined with the death of a family member which pose a high degree of threat and emotional disruption can be placed at the upper end of such a continuum." (McGee, 1968, p.320).

B. Perception of the event - the subjective assessment of the individual or family of the hazardous event, either at the time it occurs or subsequently. (It should be pointed out that sometimes a person is well aware of "what started it all". At other times, he makes no connection between his state of upset and a particular event, and it can only be inferred or retroactively traced back at a later time.) Diferrent persons tend to react to the same event in different ways, depending on their personal interpretation of it and their customary means of handling stress. Thus the perception of the current situation as problematic and stressful is dependent on whether or not such an objective social or internal condition is subjectively defined by the person involved as being outside his normal adaptive manoeuvres or problem-solving activities. This represents an important problem in crisis research as we must be constantly attuned to when and why potentially crisis-inducing situations are or are not perceived as such by the person involved.

Furthermore, during the course of the crisis situation, the individual may perceive the stressful or hazardous event as a threat, either to his instinctual needs or to his sense of autonomy;

as a loss (of a person, an ability or a capacity); or as a challenge (to survival, growth or mastery). Once again, like all perceptions, this will depend on personal variables and socio-cultural circumstances.

C. Response to the event - tension due to frustration of need rises, and this in itself involves problems in maintaining the integrity of the organism or group and may be associated with feelings of subjective discomfort or strain. Obviously how the person responds or adapts to the situation is crucial yet the importance of man's capacity to respond "actively" to crisis situations in determining their outcomes has only recently been recognised. Since responses to crisis involve complex inter-dependencies among variables at different levels and over time they raise difficult analytical issues. Hence our empirical knowledge about this area of the crisis paradigm is scant. A few theoretical and intuitive insights like those of Lindemann (1944) outlining the grief process can only serve to emphasise the need for more solid empirical work.

In most discussions on crisis repsonse, a major dichotomy is drawn between (1) Psychological responses serving primarily to alter the "perception" of the situation and (2) Behavioural or coping responses seeking to alter the "objective status" of the situation.

The psychological responses take the form of activity related mainly to the attempt to discharge inner tension and since crisis literature is full of psychoanalytic terminology such responses are usually "levels of anxiety", "denial" and other psychological "defences". The individual is "upset" and this upset is usually associated with

such subjective feelings of displeasure as anxiety, depression, fear, fuilt, anger, shame or hostility, according to the nature of the situation. There is also a feeling of helplessness and ineffectuality in the face of the insoluble problem, and this could be associated with some cognitive and even perceptual confusion, so that the person appears less effective than he usually is.

It is important to note, however, that where coping is impossible or is hindered by high level of anxiety, "defences" on psychological level may constitute the only adaptive strategy or at least a part of it. At the same time, given that employment of such defences at first might be useful in a temporary relief of an overwhelming anxiety, they are harmful in a long run since they involve perceptual distortions and postpone resolution of the problem.

While the psychological responses are aimed at intrapsychic re-adjustment, the behavioural or coping responses are aimed at the external aspect of crisis work that of adaptation. They take the form of successive, trial-and-error attempts to solve the external problem through realistic modification of the environment and constructive use of help from other persons. When the individual's repertoire of problem-solving behaviour has been exhausted Caplan (1964) theorised that he adopts new behaviours, often drastic or innovative, in order to alleviate the stress and/or symptomatic discomfort. These new behaviours constitute the work of crisis resolution and are referred to as "crisis work". A summary of adaptive and maladaptive crisis work has been offered earlier in this section of the thesis.

D. Outcome - A new state of equilibrium is reached. The state of active crisis is time-limited, it does not continue indefinitely. The Harvard theorists imply that normal resolution must occur over a finite period, often extending over four to six weeks according to the circumstances. They emphasise that whilst bringing to an end the discomfort and disorganisation, the solution may nonetheless be maladaptive or neurotic and in the long term may be harmful to the individual. At the same time, the new equilibrium may be better than in the past, in that the realignment of forces both inside his personality and in relationships with the meaningful people in his milieu may lead to greater satisfaction of his needs. Generally, the outcome of crisis situations are being thought of as leading to:

(a) a more adequate and higher level of functioning than the pre-crisis level;

(b) return to the prior level of equilibrium or the same as the pre-crisis level of functioning;

(c) a lower or worse level of functioning than the pre-crisis level

E. Balancing factors - adequate situational support and adequate coping mechanisms. The potential effect of a stressful situation on an individual is mediated at times by "protective factors", buffering or cushioning the individual from the consequences of exposure to such situations. Crisis research and theory suggests that the property common to these processes is the strength of the social support provided by the primary groups of

most importance to the individual.

A number of studies have suggested the supportive effects of the small group on individual undergoing crisis. Separation from the family and evacuation from London appeared more stressful to London children than did enduring the Blitz with their families (Titmuss, 1950). Combat studies have suggested the effectiveness of the small group in sustaining members under severe battle stress. Mandelbaum (1952) has observed that battle stragglers during a retreat were relatively ineffective when put back into the line with new units, but that units that had been able to stay together fought courageously and well. Research at Boston Psychopathic Hospital (1955) has shown that L.S.D. taken in a group situation results in less anxiety, interpersonal distortion and inappropriate behaviour than when taken individually. These and other studies suggest that the presence of others, particularly others with whom one has previously interacted, has a protective effect during crisis.

While these above studies have indeed examined the effects of social supports under some form of presumed stressful situation, the exposure of individual subjects to such stressors as the amount of social support was not in fact measured, their existence being implicit rather than explicit. In one recent study, however, both the "stressors" and the "supports" were more directly measured. Nuckolls (1972) studied the joint effects of these two processes on the outcome of pregnancy. Complete data was obtained from 170 white married primiparae of similar age and social class, all delivered by the same service. Social stress were measured by a cumulative life-change score, a method developed by Holmes and Rahe

(1967) to assess the major life changes to which an individual had had to adapt. Social supports or, as they were termed, psychosocial assets, were assessed by an instrument developed by the investigator designed to measure the subject's feeling or perceptions of herself, her relationship with her husband, her extended family and her immediate community in terms of support she has received or could anticipate receiving. Both instruments were administered to the subject before the 32nd week of pregnancy. After delivery, the records were reviewed blind for any evidence of complications of pregnancy or delivery. Neither the life change score alone nor the psychosocial assets score by itself was related to complications. However, when the relations between a high life-change score and complications of pregnancy were examined in the presence or absence of psychosocial assets, important associations were discovered. Approximately 90% of women with high life-change score but low assets scores had one or more complications of pregnancy, whereas only 33% of women with equally high life-change scores, but with high assets scores had any complications. In the absence of high life-change scores, the assets scores were irrelevant.

To test the notions advanced in this study above, further work obviously needs to be done to develop the instruments to measure these categories of psychosocial processes and outline how they are being utilised. If such research were to support these ideas of psychosocial assets as the mediating factors, it would suggest a radical change in the strategies used for preventive action. Of the two sets of factors (life stressors and social support), it would seem more immediately feasible to attempt to improve and strengthen the social supports rather than reduce the exposure to the stressors.

A recent example of the successful use of community counsellors - women without any specific training but carefully chosen on the basis of high levels of empathy, warmth and concern - in improving the wellbeing of children with chronic handicapped conditions (Pless, 1971) would suggest that, even in advance of any further specific knowledge such modes of intervention could be more widely tested.

With advancing knowledge, it is perhaps not too far-reaching to imagine a preventive health service in whcih families and individuals at high risk by virtue of their lack of fit with their social milieu are identified and particular nature and form of social support outlined that should be strengthened if such people are to be protected from ill consequences of life pressures.

On a much broader scale, the supportive structure of our environment can be viewed as providing on the one hand certain safeguards against dangers and, on the other hand, making available the tools (physical, psychological and social) necessary for meeting the challenges and opportunities afforded by the hazardous circumstance. We are indebted to Dr. Barbara Biber for a useful analogy to illustrate such twofold concepts for environmental support. The supports at times of emotional hazard can be likened to parental responsibilities at a beach picnic: on the one hand, to keep the child from such dangers as drowning or becoming lost; on the other hand, to provide those tools best suited to the child's opportunity to use the environment to the optimum, as for example planning ahead to bring along the long handled shovel that allows the child to dig holes far deeper than he could possibly accomplish in park or sandbox. Thus it is clear that hazards provide opportunities for

promotion of emotional growthas well as for preventive measures.

In summary, the model of "crisis theory" outlined above is a neuristic device as far as it only clarifies and integrates existing research attempts and suggests critical areas for future research. Furthermore, it is a model which logically identifies conditions under which a crisis situation is likely to occur and which thus provides a logical base from which to generate empirically testable hypotheses. Its utility lies in the scope of material it can encompass and in the breadth of questions it suggests.

Conclusion

Although crisis theory was born in a "psychoanalytic" environment, it has overcome its limitations successfully be becoming more adaptable to the new way of looking at mental health and integrating such new concepts and principles of human behaviour as to offer a model of value in planning both treatment and preventive services in the field of mental health. If offers the additional advantage of more sharply defining and characterising a state which occurs frequently in the life cycle of the individuals or groups and during which the helping professions and caretakers are likely to have access to people and are likely to be active.

While crisis theory is essentially "eclectic" in nature, certain basic assumptions, hypotheses and concepts seem to form the core approach. The central concept is of personality as a dynamic equilibrium, with a storehouse of coping mechanisms which can be adapted to cope with most life situations, but which becomes fluid and disorganised when faced with a potentially insoluble challenge. During this period of fluidity the potential for change - for better

or worse - is greatly increased, and help provided at this stage is most likely to be effective. These and other concepts brought forward by such approach embrace psychodynamic, behaviourist, social and organic theories of behaviour, but are not in themselves adequate to explain all normal or deviant conduct and should be viewed as guidelines for action rather than theories of aetiology.

CHAPTER IV: CRISIS INTERVENTION

A. General Therapeutic Concepts

The basic precepts of crisis theory have already been listed in the previous chapter of this thesis and need not be recapitulated. One could, however, emphasise again that the crisis situation by definition is so central and intense that significant change must result from it, which, in turn, presents the individual with both an opportunity for psychological growth and the danger of psychological deterioration. Furthermore, one of the main assumptions of this approach to mental health is that "positive" resolution of life-crisis tends to decrease the risk of mental illness and social disorder in the population since such effective handling of the crisis situation strengthens resources and coping skills, sharpens one's sense of discrimination and control of the environment, and expands self-knowledge and knowledge of the outside world. With such important areas and needs at stake to the wellbeing of individuals and groups in our community, the above conceptualisations open intriguing opportunities for actively entering the crisis arena with intentions to forestall pathology and build health.

In addition to the many aspects of the crisis model covered by the discussion preceding this chapter, there are three aspects of crisis which are particularly relevant for therapeutic intervention.

1) The outcome of crisis is not solely determined by antecedent factors, such as the nature of the hazard or the personality of the individual, That is, our fates are not sealed, but subject to our own action as well as external intervention.

2) During the crisis, an individual experiences a heightened desire for help. He experiences increased dependency feelings, a wish to be helped and signals this to his environment. The signs of his distress may in turn evoke a helping response from those around him.

3) The individual in crisis is more open to the influence of others. If effective services and help are available during such periods, relatively small investments may have high payoff, defined either in a sense of averting disastrous consequences of building new strength and adaptive resources. Crisis therefore presents care-giving persons with remarkable opportunities to deploy their efforts to maximum advantage in influencing the mental health of others. Minimal intervention at such times tends to achieve maximal effects.

All of the above three points represent a departure, most drastically at times, from the more traditional view of people in need of help.

The first point of departure is the way crisis theory perceives the outcome of such situations as being determined "less" by the previous personality structure and past biopsychosocial experience in an individual's life than by the interplay of endogenous and exogenous forces occurring in the course of crisis itself. Most crisis theorists agree that while previous experiences have some influence, the dynamics of the crisis situation and the forces set in motion both in the individual and his supportive environment are more critical determinants of the individual's ability to resolve a crisis than is his past.

This approach which gives less credence to past pathology than the present reality, frees the therapist from exhaustive history-taking and expedites problem-solving work with the client. The crisis approach sets a somewhat more modest task for the therapist than the rather nebulous notions of "psychic re-organisation" and "re-integration" that are often viewed as the outcome of extensive psychotherapy. Rather than delving into individual's past, the therapist attempts to assess how the individual sizes up the situation, how he is prepared for it, what efforts and skills he is mobilising, and what relationship these factors have to level of performance. It is not unreasonable to believe that we can improve a person's coping effectiveness either by changing or modifying his level of instrumental efforts or by attempting to alter the social conditions under which he lives so that his skills are more adequate and their disabilities less obvious.

The second point of departure lies in the fact that a very important characteristic of the individual in crisis is his readiness to reach out to others for help. This may occur even when lack of trust previously tended to isolate him from others.

A crisis situation can make anyone feel unable to handle the reality. At such times, perceptive capacities may be distorted or narrowed, anxiety signals may run loud and high and the need for defences may paralyse the person or catapult him into frantic but fruitless activity. Then, any one of us may turn to another - a friend, a relative, a professional helper - for guidance. We usually turn to someone we "trust", someone who, in our judgement, combines "love" and "power", love in the sense that he or she cares about our wellbeing, power in

the sense that he or she has knowledge, wisdom and resources in relation to the particular problem at hand. Thus crisis restores man to at times lost, but elemental, need for people on one hand, and on the other such individuals in distress evoke in others a helping response to which they can in turn respond.

People call upon other people in order to maintain their daily functioning. In exchange for the goods and services received, some goods or services must be returned. Such exchange can be through formal channels or informal ones and it can be society-wide or within relatively small groups. It is these networks which are postulated as forming the basis of exchange which reduce the likelihood that professional assistance will be needed during times of stress or crisis. Such informal "reciprocation" is precisely regulated and as such it is further postulated that an individual's capacity to tolerate the stresses of life without becoming disabled is related to his expectations that he has reciprocation available from others. Obviously, just how much the individual does expect from such network is a function of previous experience of giving and receiving and as such his position in his "credit" network may determine the amount of support available to him.

Such reciprocation dimensions are conceptualised as having two components: (a) affective or emotional; and (b) instrumental or practical. The affective component relates to the emotional support aspect of the network interaction, the instrumental component to the performance of tasks or provision of practical help. This parallels one of the major tasks involved in crisis intervention where it is assumed that provision of emotional support by significant others

during such time of crisis directly alleviates emotional distress and that practical support is also an essential part of seeing the individual through such period. Blackman and Goldstein (1968) have stressed the importance of the person's credit network, by means of which he may receive emotional support and temporary services when in a state of crisis and their empirical observations suggest that individuals who have fewer available supports manifest more psychological symptomatology.

A further distinction, related to the aspect of person's social network, should be made along the "quantity" versus "quality" dimension. The quantity is not too difficult to assess, basically the important point is to distinguish between the individual who feels that there is no one in his network on whom he can call or turn to in times of troubles and the individual who has at least one such person. Beyond that, it appears that a simple count of the number of persons with whom an individual feels he is in a reciprocative relationship, ignores the qualitative aspects of these relationships. For example, is the expectation of a great deal of support from one person the equivalent to the expectation of half that amount of support from each of two people?

A great deal of social network research has been carried out in social sciences over the last 10-15 years. The reader is referred to the social network review of literature by E. Bott (1971). Much of this past research, however, has been "nonquantitative" in nature and there remain a number of unresolved problems pertaining to the operationalisation of the social network concept. Problems of

operationalisation are particularly acute in regard to two social network properties: (a) relationship content; and (b) relationship intensity, both of which refer to the type or types of behaviour characterising relationship between the person and members of his network. Basically, the question of quality relates to the natural capacity of the significant others to offer effective or destructive response through their involvement and a more extensive discussion concerning the concept of "support" will be offered at a later stage of this thesis.

Having argued the point that an individual in crisis turn to others for help and that the kind of help he receives during the trouble is crucial to successful or unsuccessful resolution of the situation, the next logical step is to ask "who is it exactly that he turns to?"

Common sense and social theory dictates that an individual will first turn to the immediate network of significant others with whom he interacts - his family, friends, membership groups where he felt a sense of belonging, i.e. church, work club etc. Non-one would dispute the fact that as members of a communal society, most people have close contacts with friends, relatives or co-workers, so that there are "outlets" for the difficulties that are a part of everyday living. More often than not these sources are effective (doubtless because they are part of a natural trust relation) and help to resolve problems before they root. Sometimes, however, the situation is more complex, some people do not have parsimonious first-line help sources available to them or such sources are relatively impotent and fail to rise to the challenge. One would then expect such individuals to turn to a number of non mental health specialists,

such as clergymen, physicians, attorneys and educators, whose societally designated functions put them into close, trusting relations with others. Finally, the person who needs help might turn to the mental health professional and impersonal community organisations, i.e. community institutions he is familiar with or referred to.

If an individual at times of crisis exhibits a pattern in his "help seeking" behaviour that approximates a hierarchy or a continuum with primary source (family and friends) on one end and a secondary source (professional personnel) on the other, then in order to maximise the effect of such network at times when the person needs it most and develops expectations in that direction, we must have a more detailed knowledge of how people deal with their personal problems. One of the reports, in the original Joint Commission series, by Gurin (1960) presents sobering data on this matter. Roughly 25% of an interview sample, drawn in a nationwide survey in the United States, admitted to having at some time had an emotional problem for which they needed help and 15% had actually sought help. Among the help-seekers, however, less than 20% took their problems to mental health professionals. The largest single sub-group (42%) went to clergymen, followed closely by family physician (29%). Thus, even amongst those who explicitly seek help for problems <u>they</u> define as psychological, only a small fraction go to society's designated agents in this area. The fact that a majority of those who actively sought help had turned to a group of non mental health specialists, such as clergymen and physicians, is of both theoretical and practical importance. Obviously there are great numbers of "caregivers" in our society whose social roles can at any moment

bring them up against unfolding crisis or the raw nerves of human distress and, if this is the case, it should be very productive if not wise to provide such persons with knowledge and support, to strengthen the hand of those in society who regularly come up against or deal by necessity with human distress. Among the most fascinating work, including evaluation, done in community mental health consultation and training with caregivers is that of Bard and Berkowitz (1967), who trained police officers for family crisis intervention in deprived ghetto areas of New York City. In summary, the messages coming from the above discussion are that an individual turn to others in a situation of crisis which is part of his exercise in coping, and if such person-oriented deployments can be identified we would vastly increase our potential for dealing effectively with human problems.

The third point of departure concerns one of the most crucially relevant assumptions of the crisis model that during the disequilibrium of the crisis, a person is more susceptible to influence by others than during periods of stable functioning.

It has been the argument of Caplan (1964) and others that it is "easier" to help individuals when they are in crisis than during other periods because they are more open to interventions of any kind. This hypothesis is of vital significance in terms of application and the usefulness of crisis intervention in the mental health field.

Most theories dealing with therapeutic intervention would support the proposition that - giving patients help when they are most

susceptible to influence and most open to utilising a helping relationship is sensible, productive and economical. However, in most cases of patients in need of help, such opportunity is easy to wish for but hard to come by. In general, putting any therapy programme into action encounters difficulties.At times the obstacles lie in the model itself and at times in the system in which it is being applied. In any system there is a certain amount of inertia or resistance to change which presents the therapist with the first and usually most difficult step involved in changing process, that of creating motivation to change. Analysis of resistance is a prolonged procedure which must precede affectual release and conflict analysis, this in turn is complicated even further by the difficulty many patients have in basic trust which necessitates prolonged work on the establishment of a therapeutic alliance. It is in this sense that the nature of crisis per se provides "short cuts" for the opportunistic therapist. To the degree that the ego is overwhelmed, regression occurs with suspension of characterologic defences in contradiction to their resistance to change under non-crisis conditions. The conflict surfaces through this defensive breach with resulting affectual release. Defence dissolution obviates the need for skilful, yet tedious, interpretation of resistance in the transference. Prolonged relationship is replaced by a rapid, intense, trusting, dependent transference.

A person in crisis is less inflexible, less well defined, more nearly an open system in which the use of experiences in a new relationship can alter significantly the forms of adaptation. During such time-limited period when anxiety is high and motivation is great, the increased suggestibility and susceptibility create very facilitating

conditions for therapeutic intervention. There is no need for the therapist to generate "unfreezing" forces powerful enough to overcome initial apathy, resistance, hostility and defensiveness. Unfreezing (a term used to define the initial stage in the process of influence and personal change through interpersonal relationships) readies the person to pay attention to new categories of information about himself as a prelude to redefining his assumptions, beliefs and constructs about himself and his relationship to others. In contrast to this, during a crisis period such individual is already by definition in active search for such information, he is already in a state of isolation and loss of support from accustomed routines.

Caplan's analogy of the individual in crisis to a person standing on one leg, when a gentle push may cause him to put his foot down and move in a new direction is a useful one. And it is here, at such time when an individual is figuratively standing on one foot, that intervention can cause the other foot to come down in a direction that will reorient rather than devastate him. Crisis intervention can be likened to the situation of exerting a gentle push against someone standing upon one leg. The "disequilibrium" can be maintained only temporarily. The other leg eventually will come down, whether or not one pushes. The opportunities for direct intervention during the predicament period, as implied in the analogy, are twofold: first, to ensure that the psychological "other leg" comes down on firm ground; second, to exert pressure in such a fashion that the individual is encouraged to move in a desirable direction as the foot descends and equilibrium is re-established. This useful analogy clearly suggests that in working with a crisis a maximum of change may be possible with a minimum of effort, as

compared with intervention in a non-crisis situation when, so to speak, both feet are planted firmly on the ground.

Concepts of crisis intervention are most usefully considered from two points of view, as suggested by Jacobson - generic and individual (1968). In the field of crisis inquiry there are few situations that have been so well documented and extensively studied as to produce certain clearly identifiable patterns, some of which result in adaptive and others in maladaptive outcome. There are two specific areas where such patterns were clearly documented: (a) Lindemann's (1944) work on bereavement, which showed rather clearly that there is a well-defined process in adapting to the death of a relative and he called this "grief work"; (b) Caplan (1960) and his colleagues were able to examine carefully and describe fully the adaptive and maladaptive patterns with regard to the premature birth of a child. Their work has shown that the premature birth of a child is a crisis for a family, and that physicians and nurses can be made aware that the pattern of the mother's initial adjustment to the situation may have a significant effect on her subsequent relationship to and care of her child. In both of the above instances there was no attempt to determine or assess the specific psychodynamics of the individual involved. Rather, the focus was on the course that those particular kind of crisis characteristically follows and a corresponding treatment plan aimed towards adaptive resolution of the crisis. Thus these investigators were in a position to outline specific measures designed to be effective for the target group as a whole. This broad approach to all members of a given group with relative disregard of individual differences was called by Jacobson - the generic approach which permits a partial conceptual analogy to such public health

measures as immunisation and water fluoridation. The generic approach includes such sustaining techniques as direct encouragement of adaptive behaviour, general support, environmental manipulation and anticipatory guidance. It emphasises specific situational and maturational events occurring to significant population groups and does not require a mastery of knowledge of the intrapsychic and interpersonal processes of each person involved.

One of the major merits of the generic approach lies in the fact that it provides a rationale or a guiding manual for a type of crisis intervention which may be carried out by persons not specifically trained in the mental health field, such as non-psychiatric physicians, nurses, welfare workers, clergymen, teachers, lawyers and so on. Such community caregivers are the major resource to whom people in crisis turn and in order to ensure that these caregivers attend to the mental health implications of the crisis and act skillfully, they must be appropriately educated in the necessary skills. They must learn enough about specific crises to know what psychological tasks are involved in ameliorating each, as well as what is within the range of healthy and unhealthy patterns of coping in order to identify and aid those individuals who are proceeding on a maladaptive course. They can also be used as a screening mechanism for further referral for a more professional help and help to establish links between troubled people and community resources.

In summary, the generic approach emphasises the following three points:

1. specific situational and maturational events occurring to signified population groups;

2. intervention oriented to crisis related to those specific events; and
3. intervention carried out by non-mental health professionals.

However, as in any universal approach, there are some factors limiting the applicability of the generic approach. Firstly, there are many types of crises for which patterns chracteritistic of adaptive and maladaptive solutions have not yet been identified. In many instances we are hampered by our lack of knowledge of the natural history of many crises, their incidence, prevalence, morbidity and mortality and, more particularly, the relative benefits and risks of the preventive measures themselves. Secondly, it appears very likely that among all persons experiencing a common crisis, some portions will fail to respond to an approach based on the universal characteristic of the crisis and will require assistance which takes their individual pathological process into account. Thirdly, the evaluation of the accomplishments of such broadly based approaches presents monumental problems. Needless to say, the programs designed to benefit large groups of people probably never will be evaluated in the way that psychologists in particular are accustomed to evaluate psychotherapeutic procedures or particular educational devices. "Social experiments" do not permit the same kinds of control that can be maintained in the laboratory, the problems include the location and definition of popualtion groups for study, the difficulty of adequate experimental control and inadequate basic statistical data on unintervened crises. Assessment of such programmes to date is frequently based on the judgement that all help given must be beneficial yet human considerations and good sense still argues that such evaluative experiments must be carried

out. One may hope that those who do the carrying out will recognise the obligation to evaluate and to do the best they can in such circumstances. We must recognise that when large-scale actions are based on wrong assumptions the results can be damaging to large numbers of individuals.

The individual approaches appear, as Jacobson suggests, to provide the most promising techniques of crisis intervention althouth we can make use of the generic concept also when the situation calls for it. According to Jacobson, the individual approach differs from the generic approach in its emphasis on the assessment by the professional person of the specific intrapychic and interpersonal processes of the individual(s) in crisis, though this information may not be directly presented to the person. Professional efforts are directed towards the achievement of that solution which is optimal, given the unique circumstances of the particular situation. Unlike generic techniques, individual intervention requires a greater measure of understanding of psychological and psychosocial processes and it is most effectively carried out by individuals with pre-existing skills in one of the mental health disciplines, who have undergone further training in the crisis theory and practice.

In brief, the individual approach emphasises the following three points:

1. biopsychological events unique in the life of a given individual;
2. intervention directed to the individual; and
3. intervention carried out by mental health professionals.

According to Jacobson, the major distinction between the generic and individual approaches lies in the fact that, if the generic approach is in some sense analogous to such public health measures as immunisation which can be broadly applied to large popualtion groups, the individual approach is analogous to the diagnosis and treatment of a specific disorder in an individual patient. Both are seen as complementary, as they appear to have a significant place in comprehensive mental health programs, and both are economical in terms of use of manpower, and important in terms of prevention of long-term disability. Individual approach, however, calls for the use of a more skilled personnel, and should therefore be used selectively. According to Jacobson, optimum use of individual intervention would occur if generic crisis interventions were widely available and the caregivers practising the generic approach could be trained to detect cases which do not appear to respond to the generic approach and refer these cases to mental health specialists for individual treatment.

In more traditional therapeutic work, it has been felt that there are two major viewpoints of an emotional problem: that of the patient and that of the therapist. However, recent thought in the mental health professions leads us to believe that in analysing the effects of a crisis in relation to mental disorder, it is well not to focus on the referent individual in such a way as to miss the changes in the other individuals in his social network. As Peck and Kaplan (1966) have suggested, individuals rarely experience an emotional crisis in an interpersonal vacuum. A man does not usually face crisis alone, he may act as an emotional "typhoid Mary", contaminating others and at the same time he may be helped or hindered by the people around

him, by his family, his friends, neighbourhood, community and even nation. Since crisis situations, be definition, usually involve the individual's social role networks, crisis intervention also focuses active treatment on the members in the social system network of the client as well as on the client himself. Since the family of the individual going through an emotional crisis, regardless of its severity, is usually most likely to be affected by the crisis, much of the basic theoretical formulations on crisis treatment deal with families in disequilibrium. Langsley and Kaplan (1968) have reported an interesting use of families as a means of averting psychiatric hospitalisation of a family member. Their hypothesis is that a family crisis occurs when an important role is not being filled. If no agreement is reached as to who should fill the role, family pressures build up and the susceptible member may choose to escape through psychotic symptoms, seemingly irrational behaviour, suicide attempts, or a request for sanctuary. His refusal to undergo role change may be enough for the family to demand hospitalisation for him, as a maladaptive solution to their crisis. The goal of intervention then becomes that of restoring the functioning of the entire family unit to an acceptable level without resorting to the hospitalisation of the member.

A number of specific techniques are usually employed in such "primary group" model for intervention. However, it is generally accepted that understanding of the problem is usually enhanced by considering the family under the following three headings:

1. Individual family members
2. The family group
3. The family and its relationship to society

Thus, in general, whether the family is considered initially to be in a state of collective crisis because of some role disruption, or whether the state of crisis in one member acts as a hazardous blow to the other family members, the total family situation calls for careful examination, including some assessment of the individual conditions of members and where and in what way the breakdown in coping patterns has occurred. An evaluation of the family's strength and weaknesses, their capacities and motivation to change, and the resources at their disposal builds the foundation for treatment planning and execution. Restoring and augmenting communication patterns becomes a particular important treatment goal.

Finally, early detection and referral are crucial to the success of this type of preventive intervention. The increased desire for help during crisis will impel the person to ask for assistance, but unless he can gain access to the helper during the crisis period itself - a period no longer than a few weeks in duration - he will have to cope unaided. Therefore, in order to use the crisis intervention approach effectively, services must be available quickly and at the places where clients in optimal need can avail themselves of them. This situation presents no problem in many types of crisis, because the predicament itself is so clearly a life emergency, that immediate contact with a community caregiving professional is mandatory, for example, a surgical emergency, a road accident or a death in a family. In many other instances, however, the predicament is not an obvious emergency, examples are the crisis of adolescence, early marriage, change of jobs, entrance into school or retirement. In these cases the individual must reach out for help from source or agency which is not immediately available. Unfortunately many of these agencies

are not prepared to handle new cases quickly. They have long waiting lists and their clientele are usually chronic cases involving treatment in duration. At the same time such agencies usually conceive an "emergency case" as one of obvious and dramatic severity and only such cases are likely to be given priority on waiting lists. Unfortunately, some crisis upsets are often not dramatic despite their importance and therefore would not be given priority. It has been suggested that agencies should attempt to shorten or abolish waiting lists and staff should be available for immediate help. Centres for the prevention of suicide, available 24 hours a day are an example in this direction, although their effectiveness over time must be studied. Most would agree that the location of the crisis intervener whenever possible at points of crisis permits maximum exploitation of opportunities for preventive treatment, yet to date, approaches to crisis intervention do not sufficiently emphasise the concepts of out-reach and consultation. McGee (1968) has outlined four considerations which are necessary for mental health workers to effectively actualise techniques of crisis intervention: location of the facility in a specific community; availability of staff to handle crisis as they arise; mobility of professionals to enable them to move out into the community on a direct or consultation basis; and flexibility-versatility to modify traditional staff patterns. This could easily be broadened to apply to other fields of services as well.

B. Treatment Goals, Skills and Techniques

The term "therapeutic intervention" usually implies institution of a new system of contingency management. The basic paradign for such intervention is a simple one and virtually invariant: the rearrangement

of contingencies so that undesirable behaviour is no longer rewarded, and desirable behaviour is rewarded. However, that simple formula, in any given case, requires unique and frequently incredible complexity of communication and logistics and as such crisis intervention is no exception.

When one comes to consider the forms of individual crisis intervention one passes into an area of great confusion. The literature abounds with accounts of a wide variety of therapeutic and untherapeutic procedures. Crisis intervention programs are still very much "trial" programmes which we hope will enable the person to attain his therapy goal or target behaviour. In principle, the nature of the client's current behavioural disposition, his current social situation and the desired therapy goals still determine the plan or strategy or assistance to be implemented in crisis intervention. There is no limit as yet to the variety of forms of assistance being developed for clients in this largely unmapped field. It would be fair to state that, at present, crisis intervention programmes still tend to be a function of the therapist's knowledge of the treatment literature, his own imagination and ingenuity and his familiarity with the technical and theoretical details of crisis theory. In every case, there is a strong emphasis on research findings to validate or reject various forms of assistance but clinical innovation still remains ahead of systematic experimental confirmation.

In the 1960, 3rd edition of the Psychiatric Dictionary edited by Hinsie and Campbell, the term "crisis intervention" is not included. It would appear that this was a concept which, though discusses and

practiced, was not sufficiently verified prior to 1960 to be included in this fairly comprehensive text. By 1970, however, the 4th ediciton of the Psychiatric Dictionary does list crisis intervention. It is included as one of several models of community psychiatry and described as:

> "In the crisis intervention model, the focus is on transitional-developmental and accidental-situational demands for novel adaptational responses. Because minimal intervention at such times tends to achieve maximal and optimal effects, such model is more readily applicable to population groups than the medical model." (p.606)

Although such definition or descriptive statement adds little to the classification of the intervention process it does, however, indicate that the concept has become accepted as part of the armamentarium of services which workers can call upon to deal with difference kinds of clients with a broad array or problems.

At present, we find that crisis intervention no longer represents an innovation, and that much of current interest has moved on to the application of crisis-oriented techniques in programmes of brief and docussed treatment. In the literature on crisis therapy we find various shades of vigour when it comes to procedural enactment of the relevant principles and techniques. On one hand we have programs which involve the client examining himself in collaboration with the therapist in a context of a fairly informal set of operations applied to the behaviour change and on the other hand, in contrast, the intervention programs may involve a highly structured and controlled approach with exercised procedural enactment at every step. In general, crisis intervention leans towards the more structured, active approach, especially if it is being evaluated in a research-conscious expermental setting using the traditional experimental-versus-control group technique.

Although the field of crisis therapy is, on the whole, poorly conceptualised, the following kinds of axioms which are implicit in its theoretical framework present a compelling argument for the importance of this type of approach in the field of mental health.

1. A person in crisis is at a point of maximum possible change per unit of time.
2. Changes instigated by the need to resolve crisis are directed by internal and external events.
3. The changes may be enduring.
4. The changes can be adaptive or maladaptive.
5. The nature of the changes can be situationally specific or have a widespread effect upon total adjustment and the capacity to contend with future crisis.

In addition to this general rationale for crisis intervention, the following specific reasons have been advanced (McGee, 1966: p.321).

1. The effects of an emotionally disruptive situation can be reduced.
2. The end results of many untreated crisis, i.e. hospitalisation and institutionalisation, can often be avoided.
3. The growth aspects of most crisis can be promoted, and the debilitating aspects minimised.
4. Crisis intervention can frequently save time and effort of the part of mental health professionals.
5. A period of emotional crisis is the only time a large segment of our population will seek mental health assistance and be amenable to it.

Preventive intervention with individuals in crisis, unlike any other therapeutic endeavour, has clearly established goals by which to assess its effectiveness. The goals of crisis therapy range from the least ambitious one, that of returning the individual to his pre-crisis level of equilibrium, whatever it might have been, to actually promoting a major change in terms of long-term growth including the ability to better cope with future crisis. Furthermore, the goal of crisis intervention is to enable the individual to cope effectively with the current situation regardless of what past maladaptive experiences he may have had. The effort is thus to achieve an improvement in present functioning, rather than a "cure". Thus, in general, the goals in crisis intervention appear to be relatively limited: to cushion the impact of the stressful event by immediate or emergency emotional and environmental first aid and to strengthen the person in his coping and integrative struggle through therapeutic clarification and guidance during the period of crisis (Parad, 1961). More specifically, Rapoport (1970) lists six goals for this kind of treatment.

1. Relief of symptoms;
2. restoration to the optimal pre-crisis level of functioning;
3. understanding of the relevant precipitating events that contributed to the state of disequilibrium;
4. identification of remedial measures which can be taken by the client or his family or which are available through community resources;
5. recognition of the current stresses and their origins in past life experiences and conflicts; and

6. initiation of new models of perceiving, thinking and feeling, as well as the development of new adaptive responses that will be useful beyond the immediate crisis resolution.

According to Rapoport, the first four can be considered as minimal goals. However, where the individual's personality and social situation permits and the opportunity is available, work can and should be done towards the remaining two vital goals.

There are a number of approaches in the field of crisis intervention that appear useful and contain common factors in defining specific activities designed to influence the course of crisis. Caplan (1964), Klein and Lindemann (1961), Rapoport (1967), Waldfagel and Gardner (1961) have discussed techniques of preventive intervention by mental health specialists during the period of disorganisation of a crisis in an individual and his family. Parad (1966) has surveyed the efforts of a number of projects concerned with various styles of time-limited crisis intervention to individuals and families. Extracting some ideas from these approaches and from the general theory of crisis, one can produce a conceptual model for crisis intervention, intervention which is directed towards the individual and takes into consideration his social network.

To begin with, all of these techniques and studies suggest the importance of the following methodological points:

(a) Timing - intervention will be most effective during the period of disorganisation and suggestibility associated with crisis rather than afterwards. There is also some

evidence that early and frequent support is required and that the most economical utilisation of professional efforts is achieved by repeated visits at short intervals during the 4-6 weeks period of the crisis rather than by interviews at weekly intervals for many months.

(b) Dealing with dependency - individuals in crisis are more dependent and at this stage the individual's dependency needs must be recognised and indeed encouraged. Meeting the dependency needs during the crisis may indeed result in greater subsequent independence following resolution. Long-term dependency does not appear to be fostered by active intervention during crisis. In fact, the more help given during the crisis the more independent are the clients when the crisis has been resolved. Furthermore, undue dependency is also avoided by dealing with current realities rather than exploring the antecedents of the problem. However, some efforts may be needed in overcoming the individual's fear of weakness in seeking help and the professional's fear of encouraging dependency.

(c) Supportive-network orientation - crisis intervention differentiates from much conventional therapy in its frequent inclusion in the therapeutic process of family members and other important persons of the individuals involved. The nature of crisis is such that intervention or support will usually come from the individual's social network of family, friends, workmates and neighbours. These information care-givers will give support according to their own intuitive

perception of the individual's needs, which in turn is bound to be influenced by their own past experience or convictions. Therefore, if we are to accept the significance of the role of such immediate networks in being critical at the time of distress, then the role of the professional becomes that of a "co-ordinator" of these natural therapeutic forces in order to maximise their efficiency. Whenever possible intervention should support the integrity of the family or group and prevent its fragmentation in order to conserve its capacity to support the member who is most directly affected by the crisis. Families and groups can be helped to share the painful affect consequent to the crisis and comfort and support, each other as well as assist each other in more practical tasks.

(d) Fostering mastery - helping the subject to cognitive mastery of the situation. Nearly all workers who have studied crisis, particularly Caplan, emphasise the importance of cognitive mastery for healthy crisis coping. The individual is encouraged to confront the problem despite the unpleasant affect it arouses and the frustration of an unknown outcome. The individual requires all the information possible to deal effectively with the problem and to understand its predictable phases; so a useful model is the one of education, information processing, clarification and interpretation especially in relation to present feelings and current conflicts. Emphasis is also placed on enlarging the capacity for prediction and control In this sense, treatment becomes highly focussed and segmental, with stress on cognitive restructuring and mastery of some sector of the person's life experience. The client needs to

know the basic facts of the crisis situation, to plan and judge, to compare and contrast courses of action, to project into the future, evaluate possibilities and decide on those which are most appropriate. Task-oriented activity is thus to be encouraged, and hope maintained. The individual must be helped to maintain a reality focus and must be discouraged from using denial or evasion in dealing with his problems. Finally, it is important to recognise distorted patterns of adaptation and to steer the patient towards positive solutions or encourage him to seek more skilled help.

Although conscious intentional coping is probably the major process in which we engage the client with whom we plan short-term treatment, crisis intervention approach, in principle, resembles most closely the cognitive restructuring method. The resemblance runs along the lines that the crisis counsellor attempts cognitive restructuring through:

1. persuasion, education, active and directive influences as an "expert" (advice);
2. by correcting faulty reasoning on the part of the client;
3. attempting to alter expectancies or by improving discrimination of the environment;
4. mobilising and dealing with appropriate effect.

With reference to the last point it is important to note that though sensitive to "feelings", crisis intervention approach keeps them firmly within a comprehensive model of psychological functioning rather than giving them theoretical primary in

client-change. In this sense, "feelings" are viewed as useful indices of approach-avoidance tendencies by the client to various thoughts, ideas or behaviour tendencies, but the role of crisis intervener is to acknowledge these where appropriate whilst firmly keeping the client oriented to the therapeutic task.

The essential ingredient of any therapeutic treatment is the therapist's ability to produce therapeutic climate in which he generally conveys the expectation that things can be changed, expresses his own active investment in the process and conveys confidence in his ability to help. Although the helping relationships can come in a variety of types, probably the most potent is the relationship in which a steady reliable input of caring and concern and empathic alliance goes along with the actual or imputed power-to-help that is vested in the helper. Research in intervention programs has uncovered a series of guidelines as to the behaviour of the intervener in dealing with individuals in crisis - some of such guidelines have been derived from the global arena of therapy and others relate specifically to the context of crisis concept and the opportunity it provides for quick and active action. There are numerous demands placed on the therapist involved in such interventions which at times depart dramatically from other forms of treatment. The following six points can be considered as representative of the overall skills and actions that are implied in crisis intervention technique:

1. Calm confidence - This is fundamental if anxiety is to be reduced and the therapist accepted as someone capable of persuading the patient to alter his hopeless and helpless

concept of self and the world, and attempt to embark on a search for new creative coping efforts. No-one would argue with an almost commonsensicle proposition that persuasion is a function of the persuader's expressed confidence.

2. Hopefulness - Hope, like confidence, is contagious. Expectations of positive results, if honestly experienced and effectively conveyed, constitute a prime motivator for the therapeutic change. The two therapeutic concepts of hope and expectation have been receiving increasing attention in recent examinations of the outcomes of short-term treatment and such aspects of the therapeutic situation which aroused and strengthened the patient's hope of relief were found to be positively correlated with short-term improvement (Frank, 1968). Stotland (1969) also emphasises that hopefulness is a necessary condition for action and that the motivation to achieve a particular goal is partly a function of the perceived probability that the goal can be achieved and of the importance attached to it.

3. Active Leadership - In the concept of crisis intervention, helping is no longer a brilliant verbal game played by people who emphasise the pathology of others nor is it a means of enlarging one's tolerance for abuse. In crisis intervention the therapist breaks free of these traditional choices by being open to an intense pace of learning, re-learning, immense energy and work. Helping is not acceptance alone; it often involves active destruction of those forces denying helper and helpee personal emergence. Crisis situations present the client and helper together with the insistent question; "What to do, now,

at once?" and the more acute the problem is or is felt to be, the greater the drive to take some action, to discharge accumulated tension by doing. It is a commonplace observation that a person in crisis appears out of control and requires outside help provided by the therapist. There is no place here for a passive, permissive blank screen approach and the therapist must take the rudder firmly to prevent further aimless, chaotic and at times witless activity bearing little relation to the problem at hand but serving as a release and perhaps as a substitute form of problem solving. Active leadership, therefore, implies a certain amount of control and advice giving, an activity which becomes important and useful procedure particularly at the start, when the client's ego is overwhelmed. Then, with the help of the patient or family, the therapist plots a course of action before finally returning control to their hands. The basic contract in crisis intervention then is: "I will try to provide the aids, psychological or material, by which you can resume or enhance your coping capacities."

4. Intrusiveness - The individual in crisis, unable to process all the input, attempts to cope by choosing a single inappropriate focus, or in a disorganised manner, jumps from one aspect of the situation to another. The therapist must establish himself as a crucial variable in the patient's life, demanding some of the limited available attention if he intends to have influence, and at times a dramatic quality may be required. The general message at such times is: "I'm here to help, I count, you count and I refuse to be ignored or to accept your hopeless view of your situation."

5. Explicit Empathy - This is, at best of times, the most royal road to therapeutic relationship. Through it, trust rapidly develops. Empathy implies a sharing of the emotional burdens while objectivity and coping ability remains available to aid the sufferer. It is accepted, that a person overwhelmed with affect in crisis becomes extraordinarily receptive to human closeness, warmth and supportive understanding, thus it is important that the therapist, at such times, actively and explicitly convey such understanding. Without sympathy, any intervention becomes an interaction between a fact-finding cognitive, solution-oriented computer and a client in distress. Through the vehicle of empathy the therapist reaches out to share with the client that which is most distressful, his emotional discomfort, as well as facilitates and establishes the beginning of a partnership. In a crisis context, in particular, there is little time for development of trust and warmth - both the therapist and the client are deprived, to some extent, of the slow process of erecting a solid bridge over which all therapeutic effects can pass.

6. Active mastery of anxiety states - In crisis intervention the therapist must be especially sensitive to anxiety level. In crisis, one generally works to diminish anxiety to workable levels. Occasionally, this can only be achieved by actually increasing discomfort, deliberately stimulating a crisis in order to involve the patient and increase the motivation to change. This paradoxical situation arises since drastic measures are at times a prerequisite to reaching the individual in the

short time that is made available. The skilled interventionist titrates anxiety within productive limits. Anxiety thus becomes a tool to assist the patient to change his maladaptive behaviour and attain a state of improved emotional functioning.

Although all these above points and methods are no exceptions to all psychotherapy procedures, in a crisis intervention they play a more dramatic and intense role. It should also be noted at this point of the discussion, that although a crisis situation represents a dream for therapeutic opportunity, it also presents the intervener with certain dangers and disadvantages:

a) Although an individual in crisis is on one hand more open to change than usual, more accessible and susceptible to influence yet at the same time, by definition, he is also more vulnerable if handles unsuccessfully.

b) The therapist must make intelligent decisions on the basis of at times very incomplete information, since there is little time to accumulate information and reflect on one's choice of decisions.

c) The therapist faces inadequate ego in uncontrolled regression, flooded with anxiety and yet, as rapidly as possible, he must stimulate the client to try to see connections and relationships between what he feels and what he thinks, between what he does and its consequences, between his actions and the feedback he gets from those who are its targets and so forth. Clearly this strategy requires considerable activity and effort on the part of the intervener that goes beyond his attentive and responsive listening.

d) Finally, limited resources frequently force less than ideal compromises.

A good description of the nature of the therapeutic relationship in a crisis situation is offered by Golan (1969) - she writes:

> "The nature of the worker/client relationship assumes a different dimension in crisis intervention, as in other forms of brief treatment. On the one hand, the worker needs to establish quick rapport, both in order to elicit needed information quickly and to inspire confidence that he can help; on the other, the traditional concept of a 'meaningful relationship', largely based on a leisurely exploration and testing over time and which often deepens into regressive transference, has little place in this form of intervention. It may very well be that emphasis on active involvement is more significant here. The worker's authority, based on professional competence and expertise, may be enlisted to capitalize on the client's readiness to trust him during this period of confusion, helplessness, and high anxiety. The worker's ability to engage the client in taking an active role in resolving his current impasse is a crucial step in involving him in crisis work" (p.434).

Thus the emphasis in such model of client and worker relationship is placed on <u>active</u> involvement of the client in the work on his problem. What is important in a crisis intervention process is that the client be kept at work on his problem, not just as one who tells about it, not just as one who deposits it trustfully in another, but as one who (within the assessed limits of his endowments and capacities at any given time) is held to be able to take part in its modification - as one who has the right but also the responsibility to take some action, internal or external, to affect it. It is in his role as actor in relation to his problems that we validly make our working contract with him.

At the same time, this therapeutic contract allows for a high degree of activity on the part of the therapist. The therapist can and should actively control the focus of treatment and this is usually achieved through early and clear identification between client and helper of the problem-to-be-worked on. Coping strategies can not be organised or directed unless the problem seen or felt as hazardous is named, identified and located. This process usually requires tentative and jointly exploratory questions and comments that call upon thinking - upon recalling, speuclating, trying to make sense of, selecting and choosing among alternatives. Further active assistance on the part of the therapist comes from actual provision of necessary means by which to cope, or from the provision of essential information from which the understanding of the problem and its possible outcomes may proceed. The therapist may also assist the patient directly, e.g. filling out sickness benefit forms, making appointments with other social agencies, actually taking him and introducing him to other sources of professional help etc. Simultaneous with these efforts the therapist embarks upon the drawing out and stimulation, by queries, comments, and suggestions, of the "feelings" components that are involved in coping. Obviously there is scarcely any decision that does not carry its emotional freight.

Another very important strategy tailored to the situation of crisis, that is available to the therapist is that of partialization of the stressful situation. Partialization of a problem permits, indeed provides, the exploration of it in depth. Rather than exploration over a wide horizontal range with the possibility of difussion, floating anxiety, or loss of centredness, there is an exploration

of feelings, ideas and inclinations in relation to a specific part of a problem and to the possible coping means and resources that bear upon it. There is always the open opportunity to connect between this part and its concomitant parts or to shift to other parts. Furthermore, such early partialization or ordering of the "tangled ball" of problems which seem to immobilise a client in crisis, serves an important function of helping him restore his weakened sense of autonomy and regain the feeling that he is once again in active control of his life. The general rule implied in such "staking out" of areas for action seems to be that - while the therapist must help the client to confront the crisis, he must help him to do so in manageable doses - no-one is strong enough to look at an alarming and dangerous reality without some relief and by whittling down of the problems to manageable size and putting them in an ordered priority prompt relief from acute symptoms of anxiety and helplessness can be achieved. In other words, the selection of a next step or of an immediate target of action lowers the sense of overload and raises the hope of manageability.

Another helping strategy involved in crisis intervention model calls for direct involvement of significant others in the treatment itself. Thus the client and the therapist are also faced with an immediate problem to be worked out - namely how to engage the significant individuals in the patient's life to participate from the very start of the treatment.

One final casework concept, which also takes on a different aspect in crisis intervention, is that of insight based on self-understanding, considered to be a prerequisite to significant change in traditional

practice. What must be remembered is that even the sudden illumination of insight or the freeing release of emotional catharsis can still leave the person with the questions of how to cope now that he understands and feels better. Rapoport (1967) shrewdly points out that sometimes insight is no more than hindsight, of little relevance to the present situation. Except in so far as to break the links to the present conflict, in crisis-oriented brief treatment (which seeks to de-emphasise the past) she feels a more appropriate goal would be that of "foresight", the enhancement of anticipatory awareness of what can be expected in the future and how it can be handled more adequately. Thus, in crisis intervention most problem-solving goes forward, small piece by small piece, through the conscious effort to try out new or modified ways of behaving, thinking and feeling.

C. Sequence of the Crisis-Intervention Procedures

Although there can be no single formula applicable to the wide variety of individuals in crisis, one can still plan a step by step approach to the intervention by attempting to operationalise the general principles of therapeutic value in dealing with individuals in crisis as put forward by theoretical assumptions or uncovered through research efforts in intervention programs.

In terms of the intake process the initial interview or first intervention session with the client becomes crucial. There are a number of functions that the helper must carry out, sometimes simultaneously, and these usually involve empathic listening, fact-gathering, assessment and at times even treatment. Basically, the therapist can proceed as

rapidly as a patient permits, from the role of trust and confidence inducing "other" to one that encourages autonomy, initiative and reality-based action. Obviously, there are such things as "empathy time" and "problem solving time" even in the briefest of therapeutic encounters. Thus it is not difficult to speculate, that in some cases, the initial interview would allow for empathic listening only as to permit the release of the dammed-up emotions leaving the therapist with only a very preliminary impression of the client's current condition. In other words, the therapist would have listened to the problem, allowing or encouraging the client to ventilate his feelings but would not dictate or suggest any action-oriented approach to the conflict. Empathic listening, however, does not prevent the therapist from formulating initial impressions concerning: (a) the level of severity and intensity with which a particular situation is perceived by a client; (b) his dysfunction in feelings, thoughts, behaviour and physical condition; and (c) availability of interpersonal resources, i.e. presence of a supportive network of significant others in the life of that individual.

The next stage invilves information-gathering for a consensual formulation of the current life crisis. This usually consists of attempts to identify the emotionally hazardous precipitating event, its scope and severity as well as the persons involved when possible. The client is asked to describe the immediate problems posed and what he sees as his greatest needs. Right throughout such efforts, the therapist, armed with his knowledge of the nature and process of the crisis concept, retains the focus of the patient's attention on "here and now" tasks for inquiry and action. An inquiry is made into why

and how existing coping mechanisms are no longer sufficient to deal with the situation which further facilitates a better cognitive awareness of the nature of the problem on the part of the client. Concurrently with such assessment of the problem the therapist tries to evaluate the extent and appropriateness of the affective reaction on the part of the individual. In this sense, while the helper encourages the client to ventilate his feelings of loss, guilt, fear, anxiety, sadness etc. he strives for a realistic and appropriate connection between the current crisis experience and the expressed emotional conflicts. This, in turn, frequently helps to dilute the intensity of the subject's emotions and reduce the tension through a correction of distorted and "sidetracked" emotions.

Once the emotional tone is lowered, the subject's anxiety is tempered and immediate problems clearly identified and located, the subject and the worker can get down to work on how to resolve the crisis situation through cognitive mastery. Of course, the expectations of outcomes, the goals, the decisions and agreements about what to try for and what to leave alone, and other considerations depend upon the client's motivations and goals and upon the helper's "diagnostic" assessment of capacities and available resources. Nevertheless, at this stage of intervention the problem is recapitulated into "workable" terms, a tentative "area for action" is staked out, available alternatives are weighted, and a provisional treatment plan is set up. The term "provisional" is used to indicate that as with most therapy programs, assessment of "success" of "appropriateness" does not end either with "diagnosis" or with formulation of a program. It should continue throughout the programme and the helper should not hesitate to adjust or amend the program at any point, should this be called for in order

to meet the client's interest. Since the "Length of Treatment" involved in crisis intervention by definition allows for a somewhat limited period of time, such questions as: Have we selected appropriate goals? Does the client or other really understand what is expected of them? Are they responding consistently as required? Are there counter-acting variables for which we have not accounted? and so on, become more pressing than in situations where treatment can extend over a somewhat longer period of time.

Finally, as with all therapeutic endeavours, the helping process has to be terminated. Rules and arrangements between the parties involved are common in any helping relationship. They may be implicit and informal or explicit and formal and as a rule the therapist fades out of the client's life at a stage when he is either managing himself (self-regulating) or is being managed by appropriate others. Termination, as one aspect of the therapeutic process assumes particular importance in crisis intervention programs. The cessation of treatment, by definition, ends with re-establishment of a "reasonable" level of equilibrium and the restoration of coping patterns, and it may be built in from the outset through the delineation of a set number of interviews or it may occur once specifically defined goals have been achieved. What is of importance, however, is that in either case, the cessation of treatment is anticipated and discussed from the first interview on.

In brief, the intervention plan includes the following steps:

1. Presentation of therapist as a confident, calm, hopeful, capable and empathic leader.

2. Search for the focal conflict with the patient.

3. Focus on significant affects and their abreaction.

4. Explicit empathy with experienced affect.

5. Consensual summary and dynamic explanation.

6. Mutual, stepwise, structural planning, with shifting of responsibility and confidence to the patient, while encouraging him to select from appropriate alternatives.

7. Review of future possibilities of potential crisis situations, methods of resolution and sources of help.

8. Referral to a source of further help if necessary.

In summary, active problem solving after establishing a working relationship seems to be the essence of crisis intervention. This usually implies empathic listening early in the process, allowing for ventilation and information accumulation, followed by active involvement with the client in planning a course of action to resolve the crisis. Neither an authoritarian, aggressive, suppressant approach, nor a passive, blank-screen listening approach throughout seems productive. As the client becomes more active in seeking his own solutions to his current problems, the helper becomes correspondingly less active. Finally, at the point at which the client seems to have regained his self-confidence and to develop new modes of coping the helper should recognise that termination can safely take place. With reference to the goals of such intervention, it is important to point out that while the client may not be "cured" in the sense that all his problems have been neatly solved, at least they have been reduced to manageable levels at which he can handle them on his own or with the help of significant others around him. Thus, the goal of

crisis intervention is never merely the resolution of the crisis. Crisis, by definition, is always terminable. Intervention seeks as its goal a higher order or resolution than would be provided by nature or chance alone.

D. Criteria for Crisis Intervention Application

If one accepts the assumption that crisis intervention should be used selectively as one of a variety of interventive strategies, there are two issues that require a closer examination: (a) types of clients best treated and (b) when is a client in crisis?

In reviewing the literature prepared by clinicians from their actual experience in doing brief or crisis therapy it became quite clear that this treatment modality had been most frequently applied to stable of "healthy" individuals, where the stressful situation did disrupt an otherwise stable homeostasis. The practitioners usually attempted to intervene with such "non-sick" population at two levels: on the primary prevention level to keep a potential crisis situation from developing and on the secondary level, where once the client has experienced the hazardous blow and while the acute stage was in progress, an attempt was made to minimise the effects of the crisis. Very rarely an attempt was made at intervention on a tertiary level, after maladaptive or even destructive adjustment has occurred, to halt further deterioration, and deal with the debilitating after-effects of the earlier crisis.

Porter (1966) points out that clients most responsive to crisis intervention are those for whom the onset of the psychological problem is clear cut, whose prior level of adjustment was stable, for whom the

crisis was generated out of a reciprocal role relationship and who have some knowledge of both the social and behavioural difficulties for which they seek help and of the precipitating stress, even though they may not connect the two. Other researchers point out that, while not many people may be motivated to change their way of behaviour or feeling, most ask for help for relief of their discomfort and reduction of external pressures. Such findings substantiate Rapoport's (1967) contention that while not many people may be motivated to change their ways of behaving, all people in distress are motivated to obtain relief from suffering. This fact, she believes, is the proper starting point with people in crisis.

However, the issue related to the type of client for whom the crisis intervention is best applicable goes beyond the simple criteria concerning the nature of the request for service and the extent to which the applicant wants to change his behaviour. It goes beyond the consideration of "crisis subjects" which suffer both acute stress and acute symptoms but who otherwise have previously demonstrated behavioural adpatability and flexibility in their ability to cope in the past. The central question to be posed is: what should be the criteria for crisis intervention application with subjects who are chronically the victims of symptoms of emotional disturbance and who are struggling with chronically stressful circumstances?

In psychiatric practice we are frequently confronted by individuals whose habitual coping methods are so inadequate that they pass from one crisis to another. Indeed, many clients frequently seen in social agencies seem to live in a chronic state of crisis and one may say that being in a crisis state is part of their life-style because of

a general inadequacy of their social functioning. Crisis for such individuals do not seem to have a beginning, middle and end, but flow into each other and are compounded and circular.

To many practitioners in the field of crisis intervention it is clear that the concept of crisis and its management do not apply to such individuals and families who are beset by multiple problems, chronic and continual states of heightened tension and disorganisation. They feel that such clients do not represent good candidates for such intervention since here one is dealing with a different order of phenomena, which is not adequately explained by crisis theory. Although many of such clients manifest the overt symptoms of urgency, disordered affect, disorganised behaviour, and ineffectual coping, a number of mental health professionals would be quick to point out that a closer examination would show that underneath such appearance, the basic character structure reveals severe and chronic ego depletion and damage. To many in this group, the crisis appearance involved is not a reaction to the original hazardous event, but a maladaptive attempt to ward off underlying personality disturbance or even psychosis. Armed with such convictions, a number of practitioners would argue that such "chronically poor copers" would not be able to engage in the crisis resolution work involving learning from their experiences and in developing more adaptive coping patterns.

Such convictions and attitudes expressed above cannot remain unchallenged although it is difficult to argue with the "overt" validity of such rationale. To begin with there are a number of questions which still await further investigation before one would discard the promise of growth and change to individuals who otherwise may not be considered amenable to crisis intervention approach.

may not be considered amenable to crisis intervention approach. Such questions would be: (a) are the psychological consequences of acute stress and symptomatic disturbance identical for both the stable or "healthy" population and a population of unstable, minimally adjusted individuals? (b) does the acute exacerbation of chronic conditions of psychological stress and tension constitute a period of potential growth and engender the same cognitive and affective processes that were described as characterising victims of prematurity, surgery, or the sudden death of a loved one?

Much research remains to be done before we can say, with any level of certainty, for whom the crisis approach is the treatment of choice. Obviously, to date, the differentiation does not seem to respond to classification by symptoms, diagnostic categories, nature or problems or function of agency. It still seems reasonable that acute stress, acute symptoms and the urgency to resolve the former might generate different psychological and cognitive processes for chronically maladjusted persons and, therefore, represent either no crisis at all or a qualitatively distinct type of crisis for these individuals.

The health profession is confronted with yet another group of clients for whom providing continuous support is probably a necessary attribute to their continuing to function, even in a limited way, such as the discharged mental patient, the physically or mentally handicapped and the aged ill. What of such many patients who do not fit the crisis model? Certainly anyone who has worked in an emergency and psychiatric clinic must acknowledge the large number of patients who have little or no faith in "talk" therapy or who have had numerous unsuccessful

experiences with mental health treatment programs. Can we prescribe crisis therapy for such chronically disturbed patients who were either not oriented toward psychotherapy or for whom the prognosis for extended or intensive treatment was considered to be poor? In practice many practitioners will resort to such treatment modality when faced with those persons who reject and who have been rejected by more ambitious therapies although their basic orientation would not be towards personal growth and maximising the potential for the development of positive mental health. Such patent characteristics as lack of motivation for extensive or intensive self-examination, the presence of chronic and severe deficits in psychological or intellectual functioning, and the failure to benefit from traditional psychotherapy would probably be used as a rationale for brief or emergency therapy although none of these criteria offer the optimistic promise of increments of positive mental health which is inherent in crisis theory.

Nevertheless, isolated instances where such particular group of patients has been exposed to crisis intervention treatment, report its usage for that group with signal success. It has been shown that even psychotics can respond to short-term crisis support, and sometimes those with severe handicaps adjust admirably to life demands, despite (or because of) their handicaps. Indeed, in the past few years, crisis intervention has become spoken of, increasingly, in the sense of intervening in the disequilibrium of overtly psychiatrically ill individuals and although the previously noted principles about crisis and intervention remain applicable, the major focus in such attempts is one of the care-delivery and shortening of the acute process. The goal is usually restoration to the premorbid level of functioning or

limiting and minimising disability and little attention is paid to the concept of crisis as a stimulus producing a higher level of functioning homeostasis. The existing programs at such levels of secondary and tertiary prevention have so far been attempted in two main areas: (1) the avoidance of hospitalisation; and (2) shortening of hospitalisation and will be discussed in some detail in a later section of this chapter.

Thus, and although many practitioners perceive the concept of crisis as seemingly inadequate to describe many chronically unstable persons and have seized upon such forms of intervention expressly because of the poor prognosis for extended and intensive treatment for such patients, continued emphasis on a concept of crisis could serve to distract the clinician's attention from such "less appealing" patient characteristics. If we are in the business of helping people to cope with some aspects of their life and social functioning and whether we assess them as successful or not, they must be seen and accepted as "one-who-is-trying-to-cope". The person is seen thus, as a past and present and immediate-future actor in relation to his problems, not just as its put-upon victim. Many "chronically maladjusted" individuals could be seen as persons with previously satisfactory adjustment who, following a single unresolved crisis, experience a sequence of episodes of disorganised behaviour apparently precipitated by minor stresses.

Thus crisis theory offers both the hope of improvement in the individual with habitually poor coping techniques in whom the satisfactory

resolution of a crisis episode may provide an improved repertoire of coping techniques which can be generalised and, on the other hand, an explanation for the apparently inexplicable decompensation in a previously well adjusted individual.

Another problem related to the issue concerning the criteria for crisis intervention application lies in the difficulty in obtaining agreement that a crisis situation exists. Definitions of crisis vary widely, they include objective behavioural manifestations, subjective feeling states and at times traditional psychiatric concepts of emergencies and as Parad (1968) points out, not only is there disagreement among professionals, but among clients and workers as well, as to what constituted a crisis and the severity of the reactions to it. Although many would argue that in practice, prgamatically, these definitions are of little value when the clinician is faced with an individual seeking help or a family disturbed by one of its members and he has an emergency on his hands requiring responses regardless of prior definitions, others would warn and insist that further refinements should be available to question "is that individual in crisis?" before any attempt to assess the effectiveness of such treatment modality could be undertaken.

Bloom (1963) insisted that unless further refinements of the crisis concept is undertaken, assessment of the effectiveness of intervention will not only be difficult but also inappropriate. He writes:

> "In order to test the efficacy of intervention at times of crisis, a sample of people in crisis must be identified. Following this identification, one could contrast outcome in a subgroup who had been exposed to intervention procedures with another subgroup which had nto been exposed to such procedures. Outcome in both the subgroups could be compared with that in a non-crisis group. But whether or not a controlled study of this kind is undertaken, the identification of the crisis subgroup should be sufficiently unambiguous so that it is the intervention which is clearly the subject of study. Failure of intervention procedures should not be attributable to misdiagnosis of the crisis state." (Bloom, 1963 p.502).

Bloom began by noting the consensus in the crisis literature about the definition of crisis and pointed out that three elements, in general, appear to characterise a crisis-state: a stressful precipitating event; disruption of functioning, and duration of disruption for at least several days or longer. He then attempted to examine whether crisis is defined in a consistent way by different professional workers. He tested this by means of fourteen brief case histories containing different versions of the crucial elements of crisis, the variables being the presence or absence of a precipitating event, sudden or gradual onset of symptoms, recognition by the individual of internal tension, presence or absence of behavioural disorganisation, and rapid or slow resolution of the stressor conflict. The series of fourteen histories was then given to eight expert clinical judges in the field of crisis theory. They were asked if each event constituted a crisis for the individual involved, and to give the reason for the answer.

There was a marked lack of agreement about whether the case histories reflected crisis. In only five out of fourteen instances were unaminmous judgements given. With respect to the factors which contributed to the judgements of crisis, Bloom (1963) writes:

> "The judgement of crisis is made significantly more often when there is a known precipitating event than when the precipitating event is unknown - and is made significantly more often when there is slow resolution as contrasted with rapid resolution. Judgements of crisis are made with particular difficulty when the precipitating event is unknown. Under this circumstance there is a high level of uncertainty on the part of the judged."
> (Bloom, 1963 p.501)

Thus, two elements were found to be significantly related to a judgement of crisis: (a) a known precipitating event; and (b) a slow (one to two months) rather than a rapid (one week) resolution. Furthermore, crisis judgements appeared to be unrelated to variations in the other three variables that are usually considered as fundamental characteristics of crisis since the judges placed less emphasis on internal tension, behavioural disorganisation and rapidity of onset of symptoms than is ascribed these criteria in the theoretical literature. Bloom summarised his findings as follows:

> "Known precipitating events are generally judged to lead to crisis if (a) there is no reaction or if (b) there is a reaction of any kind and resolution requires a month or more. The judges' comments suggest that situations in which the resolution is rapid are commonly viewed as episodes illustrating appropriate responses to reality situations. Reactions of any kind which appear when there is no known precipitating event are likely to be considered psychiatric disorders rather than crisis." (Bloom, 1963 p.502)

Although Bloom is still forced to conslude that crisis appears to be an exceedingly amorphous concept, identifiable mainly from the presence of a precipitating stress event, and protracted because the individual is unable to resolve it immediately and as such one might be tempted to simply define the crisis state as inevitably following certain specific events, he still cautions against an oversimplified definition of crisis purely in terms of specific events. On the other hand, if one does not define crisis solely by the existence of some stressful

event in the life of a person, the logic would dictate a development of a valid, reliable and qualifiable measure of the absence or presence of crisis which would distinguish between those people for whom the event results in a crisis state and those people who seem not to be in crisis as a consequence of the event. Although the implications of such "test" for clinical work would be of greatest importance, to date, this kind of discrimination is not possible as such validated and standardised test for providing a clear definition of who is, and who is not in crisis has not yet been reported.

When it appears that, even the most highly skilled clinicians in both crisis theory and community mental health practice tend to vary greatly in their emphasis on the crucial features concerning the nature of crisis, one can safely assume that when a mental health professional is exposed to individuals experiencing crisis, before he acquires any special knowledge of crisis-like reactions, he is likely to feel puzzled and even somewhat disoriented. He will be surprised at the extraordinary variety of seemingly gross behaviour pathology among for example, physically ill patients and at subsequent changes in patient behaviour that frequently turn out to be the opposite of what he had expected. For certain cases his diagnostic and perhaps pessimistic prognostic judgements will turn out to be quite correct. For example, on a large surgical ward, there will be an occasional patient who begins to display hallucinations, delusions and other psychotic symptoms characteristic of schizophrenic disorders. Such cases can be readily identified as post-operative psychosis. On the surface, such reaction <u>cannot</u> in any way be distinguished from the familiar pathologic patterns seen in mental hospital, the only

difference being that the onset has been precipitated by the stress and crisis of physical illness. No one would argue with the possibility that a large number of physical and chemical changes that occur during illness and treatment may lead to some form of psychosis. The disease process may destroy important organs, including nerve tissue and the structural alterations may have profound effects upon behaviour. Moreover, injections, toxins and drugs may alter the chemical balance of the organism which can in turn generate acute behavioural alterations.

However, the situation is quite different for the vast majority of manifestly disturbed people seen on the hospital wards - people who are suffering from recurrent pains, the threat of mutilating treatment, confinement, separation from loved ones and a variety of other stresses associated with their predicament. Their emotional outbursts, preoccupation with bodily processes, withdrawal and relative lack of interest in the social world, might initially incline a naive clinician to assume that the hospital experience has precipitated in these people a severe neurosis and a host of hypochondriac reactions. If he makes a diagnosis of this type, the inexperienced clinician would certainly not predict that the psychological symptoms will clear up spontaneously when there is a change in environmental conditions and he might expect a relatively poor prognosis if such patients were to be treated with prolonged psychotherapy. What the clinician must keep in mind is that although both types of patients are experiencing an emotional crisis, each group is in need of a different type of help! One of the main differentiating criteria between those two groups of people with seemingly similar symptoms is the degree to which the symptoms are dependent on the current life stresses or crisis to which the patient

is subjected. Such crisis reactions and somato-psychological symptoms are clearly related to the objective conditions of the patient's current life situations and, unless it involves irreversible physical damage, will improve when the intensity of physical suffering or external stress and demands decreases. The patient's egocentricity, hypochondriasis, regressive dependency and affective symptoms are highly reversible and can sometimes be alleviated rapidly merely by providing help and support which will eliminate the source of severe threat, discomfort or frustration. Modifiability, as a function of environmental events and interpersonal communications, is the first important characteristic denoting the non-pathological emotional states that occur under exposure to stress stimuli or crisis situation.

The first step in working with crisis is to know what to look for. However, the operational terms that have been worked out, by many practitioners in the field, for identification of the components of an emotional crisis must still be considered as diagnostic abstractions since only some "crisis" cases actually present such an orderly, clear-cut picture of the components involved in crisis situation. So it would seem that, do date, careful questioning focused on the client's current life situation - which is too often neglected - would best serve and enable the health worker to determine whether or not the client is in an incipient or active state of crisis. Furthermore, in such questioning, attention should be given to the intensity and duration of the affective reactions which should appear to be roughly proportional to the perceived magnitude and importance of the threat or loss implied by the stressful situation.

E. Brief Psychotherapy and Crisis Intervention

In the last three decades brief forms of therapy have become increasingly popular. The popularity parallels the increasing concern on the part of mental health professionals for the development of more effective and more efficient treatment modalities to better meet the needs of the entire community.

Many mental health professionals have conceptualised brief therapy as a modification of traditional, psychoanalytic treatment. They have retained psychodynamic conceptualisations about the nature of personality and the origins of psychopathology but suggested that the traditional techniques of analysis and psychotherapy might be altered under certain conditions.

Bellak and Small (1965) and Wolberg (1965) have enumerated a number of rationales for the modification of traditional psychotherapy. Brief treatment may eliminate or reduce waiting lists for therapy and the insufficient number of mental health professionals may be better able to serve the ver-increasing numbers of applicants for treatment. Brief therapy may be more responsive than traditional therapy to the special needs and capacities of persons who fail to improve in traditional therapy, of persons who are chronically mentally ill, of persons who are not motivated for or are not educationally or philosophically prepared for traditional therapy, and of persons whose complaints do not necessitate extensive or intensive interventions.

In order to further justify the modifications of traditional techniques some clinicians have seized upon Caplan's concept of crisis as an additional rationale. Many have cited Caplan (1960, 1964) and Lindemann (1944) whose studies and reviews of persons in crisis have noted that intervention to promote certain types of adaptive behaviour was particularly therapeutic.

Despite the differences in theoretical and practical rationale, the suggested brief treatment and crisis intervention models of therapeutic intervention were quite similar. Indeed, Bellak and Small defined emergency psychotherapy as brief therapy applied in conditions of acute situational or symptomatic disturbance.

The author has reviewed the literature about brief therapy, as a modification of traditional therapy (Bellak and Small, 1965; Wolberg, 1965; Hoch, 1965; Cottell, Forster and McKinnon, 1963) and the literature which has emphasised the concept of crisis as a basis for employing crisis intervention techniques (see Chapters III and IV). From this review the author was able to determine a general consensus about the nature of crisis intervention and brief therapy. There was considerable agreement with regard to at least six treatment variables.

(1) Length of Treatment: Treatment should last roughly one to six weeks and should begin as quickly as possible. That is, the patient should be seen right away and should be offered some form of assistance in that initial contact if possible. In general, however, brief psychotherapy allows for a somewhat more flexible "average" length of treatment than is the case for crisis intervention.

(2) Goals of Treatment: Typical specifications of appropriate goals included: target-symptom relief; restoration to optimal level of functioning prior to present illness; curtailment of regressive behaviour; greater cognitive grasp of current reality situation; clarification and resolution of precipitating stress. A closer examination, however, indicated that while brief psychotherapy was more attuned to removal of specifc symptoms, crisis intervention placed greater emphasis on the actual resolution of the immediate crisis situation.

(3) Focus of the therapist at the outset of treatment: Very early the therapist should communicate to the patient both his understanding of the patient's dilemma and his assurance that he can assist the patient to alleviate his discomfort. The treatment should focus on current conflicts, recent stresses, active symptoms or behaviour. Historical material should be elicited only to formulate a quick diagnostic impression or to clarify the current crisis situation. Once again, although both modes of treatment make use of genetic past as it relates to present situation only, crisis intervention, in general, demands greater emphasis on the genetic present.

(4) Therapist's activity and authority: The therapist must participate more actively than he would in traditional treatment. He may offer advice, make suggestions or provide basic information or education. By his actions the therapist directs the patient towards the adoption of problem-solving behaviours.

(5) Transference (patient-therapist interaction): The therapist may relate "as a real person and open expressions of interest, sympathy, encouragement are permissible" (Hoch, 1965 p.135). The proponents of brief psychotherapy, however, seem to express greater concern with the issue of transference than do crisis interveners. They stress that excessive dependency must be discouraged and the therapist should avoid or curtail the development of extreme positive or negative transference. On the other hand, crisis intervention practitioners feel that long-term dependency does not appear to be fostered by this type of intervention. Furthermore they feel that, undue dependency is also avoided by dealing with current realities rather than exploring the antecedents of the problem.

(6) Significant Others: Significant individuals in the patient's life may be involved in the treatment. This most certainly applies to the patient's family or close friends. However, crisis intervention goes one step further and acknowledges the importance of mobilising and involving all available interpersonal and community resources.

While reviewing the literature concerning the two treatment modalities discussed above, the author has also noted several consistent differences between the analytic proponents of brief psychotherapy and the adherents to crisis theory. The former were consistently more adamant about conceptualising the therapeutic intervention in the context of a thorough understanding of the patient's psychodynamics.

They repeatedly stressed the importance of careful assessment and diagnosis and they more often mentioned the development of insight as one goal of brief treatment. Lastly, the psychoanalytically oriented clinicians were particularly insistent that the brief or crisis therapist needed to be the most experienced clinician rather than the novice or non-professional mental health worker.

F. A Review of Evaluative Studies of Crisis Intervention Programs

All individuals engaged in the modification of human behaviour have a dual responsibility. Not only must they develop and implement intervention technology but they must also assess the effectiveness and outcomes of their interventions. In any area of therapeutic endeavour the first task, the development of intervention techniques, has received by far the larger share of professional effort. For some it is the more rewarding of the two tasks; for others, more glamorous. For whatever reason, our evaluation methodology and assessment of treatment techniques is still seriously underdeveloped and only a handful of researchers turn their attention to a fundamental problem of assessment: the observation and report of change.

To describe change, certain aspects are selected and others rejected. We usually choose to chart those aspects that seemed meaningful to the intervention, those aspects for which we could develop means of observation, those aspects whose change we could communicate to others and in some way explain. Thus it appears that different methods of evaluation will be most appropriate for different treatment programs - for some, subjective reports by recipients of increased psychological and physical well-being will be appropriate;

for others, professional assessment of symptom and behaviour change; and for still others, lowered rates of such objective measures as incidence of suicide hospitalisation rates etc.

The above efforts can therefore be classified into four types of research which often are considered evaluative: (1) program description; (2) evaluation based on judgements made by recipients; (3) evaluation based on judgements made by professionals; and (4) evalautions based on analysis of objective data without recourse to intervening interpretive judgements. Obviously, only the last three can truly be considered evaluative with the last type of evaluation based on objective data, being the most plausible and desirable. As with any scientific evaluation of the effectiveness of therapeutic approaches, each of the different attempts outlined above has its own built-in problems of reliability, validity and bias and although the type of evaluation that is based on objective data is aimed at reducing if not eliminating such difficulties, it too has its problems. For example, hospitalisation rates depend heavily of admission policies; thus a high rate of admission can lead by a change of administrative policy to many more psychotics living with their families without affecting the prevalence of psychosis. In this instance, it can be seen that seemingly objective data, i.e. admission rates, may be dependent on unseen and unstudied subjective factors of both patients and families, and of professionals.

Notwithstanding the many difficulties and methodological issues involved in scientific evaluation in general, and ones that specifically challenge the evaluation of crisis intervention approaches, the fact remains that, to date, a review of "crisis" literature has failed to

reveal more than a handful of published work of that nature. The work published on crisis model, contains chapters that reflect the evolution of theory, the state of the clinical art, guidelines for organisation, suggestions for training, ideas for techniques, and advocacy of empirical research but the chapter dealing with concrete efforts, successful or unsuccessful with respect to applying and evaluating the crisis-intervention techniques is the shortest and least mature of all.

In the past decade we have witnessed an almost astounding growth rate of institutions designed to deal with mental health crisis and their substantive manifestations. Equally astounding is the fact that very few of these crisis programs have built a systematic evaluation plan into their program design. Thus, crisis intervention programs are frequently adopted and implemented without adequate evidence of their effectiveness or provisions for their continuous evaluation after adoption. While many ideas and suggestions from such programs seem plausible, most of them are still based on clinical judgements or are transpositions of findings from one area of research to another. As a result, few mental health professionals seem to know if their crisis services really work.

The focus on crisis therapy and community mental health has been accompanied by many claims of efficacy and success, but few have been based on follow-up studies or evaluation using proper control groups. After reviewing most of the research studies concerning the concept of crisis and crisis resolution Mill and Iscoe (1963) commented as follows:

> "There has been little or no hypothesis testing, quantification has been minimal, and the necessary cross-validation studies remain to be performed. The employment of suitable control groups and follow-up studies are totally absent. These shortcomings apply to a great deal of behavioural science research and should not detract from the essential merit of the crisis concept itself. It would seem that work has progressed to a stage where the application of refined social science methodology could exploit the potential utility of the concept." (Miller and Iscoe, 1963 p.198)

To date, we have indeed managed to learn much and could say a number of sensible things about individuals in crisis, in particular we have become more critical about some of the evidence in this region, however, we do not seem to be any wiser of its worth and value in terms of its promise with regard to the usefulness of the concept in treatment. The effectiveness of crisis-intervention therapy, though generally optimistic, remains uncertain and its worth in terms of improved mental and physical health and social adjustment remains to be estimated.

The literature on "crisis" as a concept is by now extensive, a great deal of epidemiological and sociological evidence which has accumulated over the last twenty years can be seen; all of which attests to the value of the concept for understanding of mental well-being and for the design of productive research. However, as Caplan himself has acknowledged, his studies unlike many others have been descriptive and designed to generate hypotheses about crisis resolution. A review of the literature has not yielded a single study which has either attempted to verify that a particular stress was perceived as threatening to each individual or undertaken to offer evidence of the presence of the other necessary and sufficient criteria defining the incidence of a crisis. Many students of the concept would be quick to point out

that the "definitional fuzziness" of the crisis concept has probably inhibited research in this area, however, this still does not justify the fact that much of the work published on crisis has been of a clinical nature leading to a proliferation of techniques for intervention with little adequate assessment of these techniques.

Yet it should be obvious to many that in the long run when the "crisis fad" fades, professional and public support will be sustained only by proven success. Implicit in many criticisms of new modes of help or therapeutic intervention are sets of unexamined assumptions that "stack the deck" against a positive evaluation of them - this is a "luxury" we cannot any longer afford if we wish to facilitate the emergence and evolution of crisis intervention programs. Our own history with numerous therapeutic approaches which had its day and then largely disappeared should serve as a constant reminder that similar danger faces the crisis intervention movement whether or not the treatment model is valid. Such development would be especially tragic if it was brought upon by the lack of clear demonstration of program efficacy, rather than unequivocable evidence of programs failure or a diminution of the need for crisis services.

At the present time, the literature on research in intervention programs has uncovered four studies that could be considered "evaluative" and have proved crisis intervention programs to be of value. Two such experimental works on intervention have been concerned with the technique of "anticipatory guidance" as a test of Janis's theory of communication and stress resolution for predictable crisis events. Janis (1958) has opened a whole new field for viewing

crisis intervention by advocating the principle of anticipatory guidance or as it is at time called "anticipatory worry". In his studies he has shown that among the patients awaiting surgery it is possible to predict which ones will have the least difficult post-operative physical and psychological adjustment. His studies also suggest that if a person facing an impending crisis situation known ahead of time what he must cope with and begins to master it, he will be better prepared psychologically to handle the stress when the situation is upon him. At the same time, it was Janis himself who first acknowledged the lack of 'proper' experimental design in his studies. He was aware that to obtain clear-cut evidence for testing his hypotheses concerning the behavioural consequence of such psychological preparation, it would be necessary to produce data from controlled experiments in which post-operative comparisons are made between one group of patients who have been given certain types of preparatory communication and an equivalent group of control cases who have not.

Moran (1963) conducted a study with children awaiting tonsillectomy. In the experimental group, each parent, as well as each child, was given information on admission about ward procedures and a descriptive account of what the child would be likely to experience. An equated control group received only the standard hospital care. Nursing procedures and the presence of the parents were equivalent for both experimental and control groups. Observations on both groups were carried out by special observers using "blind" procedure, which avoided contamination. The children (and their parents) in the experimental group were found to have fewer signs of emotional disturbance during convalescence, not only while in the hospital but also at home after discharge.

Egbert (1964) looked at reduction of post-operative pain by encouragement and instruction of patients. The study sample consisted of 97 patients undergoing elective intra-abdominal operations. All patients were visited the night before operation by the anaesthetist, who told them about the preparation for anaesthesia as well as the time and approximate duration of the operation, and warned them that they would wake up in the recovery room. The patients were then divided into two groups by random order; 51 patients (control group) were not told about post-operative pain by the anaesthetist. The "special-care" experimental group consisted of 46 patients who were told about post-operative pain. This experimental group was also informed where they would feel pain, how severe it would be and how long it would last and reassured that having pain was normal after abdominal operations. The "special-care" group also received instructions for relaxation techniques to reduce the pain. The patients were not informed that a study was conducted and the hospital staff, not knowing which patients were receiving special care, continued their practices as usual. After the operations, narcotics were ordered by the surgical residents which were later administered by the ward nurses, who were also unaware that the patients were being studied. After the patients were discharged, the total dose of narcotics administered for the first five 24-hour periods after the operation was tabulated for each subject. When the control group and special-care group were compared with regard to their narcotic requirements following surgery, Egbert was able to demonstrate that it is possible to reduce such post-operative narcotic dosage by approximately <u>half</u> through pre-operative guidance and information. In addition, it was demonstrated that patients who were encouraged

and guided during the pre and post-operative period by their anaesthetists were considered by their surgeons ready for discharge from the hospital 2-3 days before the control patients.

Both of the above experiments provide clear-cut evidence concerning the positive value of preparatory communications and add considerable support to Janis's correlational and clinical observations indicating that accurate predictions about impending physical pains and discomforts tend to reduce the incidence of subsequent physical and emotional disturbances. They also represent a good illustration of intervention efforts on the primary prevention level to keep a potential crisis situation from developing.

The type of crisis intervention being evaluated in the following two studies might be more appropriately categorised as secondary prevention as opposed to primary prevention. At this level the practitioner intervenes once the client has experienced the hazardous blow and while the acute stage is in progress, in order to minimise the effects of the crisis. What is of special significance regarding these studies is the fact that an attempt was made to intervene in the disequilibrium of overtly psychiatrically ill individuals. The essential distinction here was that the patients for whom crisis intervention treatment was prescribed were often suffering from fully developed psychiatric disorders, indeed, many of them were chronically and severely ill.

Both studies attempted to test whether family crisis therapy could provide an effective alternative to psychistric hospitalisation or result in shortening of such hospitalsation. It seemed reasonable to

assume that families which request hospitalisation for a member, often do so because they have not been able to resolve the stresses which impinge on them. Thus, family requests for psychiatric hospitalisation can and should be regarded as evidence of disequilibrium within the system of the family - a crisis. Requests for mental hospitalsation are typically based on a sense of panic and frustration. The family come to believe that it can no longer manage on its own and in many instances hospitalsation offers the means for running away from problems which need to be dealt with. With such an orientation, it seems possible to give the patient and family the help they require to avoid removing the designated patient from the family and community.

In an effort to evaluate such intervention, an elaborate research and treatment program was undertaken by Langley and his colleagues at Colorado Psychiatric Hospital. A Family Treatment Unit was established in 1964 for the purpose of studying the use of family crisis treatment for a random sample of patients who have appeared in the Emergency Room of Colorado Psychiatric Hospital requesting hospitalisation. One hundred and fifty patients deemed in need of immediate hospitalisation, were randomly assigned to outpatient family crisis therapy, while 150 similar patients were hospitalised. Langsley (1968, 1971) reports the following results: (1) It was possible to treat all of the experimental cases (family crisis therapy) on an outpatient basis, thus avoiding hospitalisation in all such patients; (2) After six months, twice as many of the originally hospitalised patients (control group) had to be rehospitalised as compared to the group in family crisis therapy (experimental group). This difference persisted after 18 months of study; (3) In addition, those patient originally

hospitalised, when rehospitalised stayed an average of twice as long as those in the family program; (4) On various tests measuring functioning capacity, the group in family crisis therapy did as well, or better, than the hospitalised group; and (5) On a cost basis, the family crisis program was one sixth as expensive as the comparison hospitalisation program.

While the above programs were aimed at the avoidance of hospitalisation, several programs of treatment and research have been undertaken in the other main area of psychiatric emergencies that of shortening of psychiatric hospitalisation for patients who cannot be treated on an outpatient basis. Weisman (1969) reports on a program of intensive intervention undertaken at the Yale-Connecticut Mental Health Center. Patients deemed in need of hospitalisation were offered conventional psychiatric hospitalisation or a special contract. The contract consisted of three days of inpatient care in the emergency treatment unit plus 30 days offollow-up outpatient care by the same personnel. Thus, a definite time limit to hospitalisation is set and the discharge planning is a part of admission procedure. Sharply defined goals are established and the active involvement of the patient's important others is pursued. The message conveyed to the patient is that he is a person capable of and expected to handle his life. Responsibility is restored to the patient; dependency and regressive prolongation of the sick role is discouraged. The expectation of rapid restoration is ever present. The intervention is intensive and offered by multidisciplinary staff on a 24 hour basis. Such multidisciplinary team approach is expected to offer the patient help in the many social and psychological areas that are not amenable to purely psychiatric intervention. Follow-up of the first 100 cases

being offered such special contract, indicated that 18% were transferred to longer inpatient care immediately after the three-day period, with another 19% being hospitalised within one year of discharge. Thus, after one year, 63% did not require further hospitalisation. A two-year follow-up revealed 6% more hospitalised. This compared favourably with the follow-up studies of the group being offered conventional hospitalisation. The degree of effectiveness of the program reported be Weisman (1969) was further supported by results of another program of short-term hospitalisation implemented in the Emergency Psychiatric Service at Colorado General Hospital. Rhine (1971) presents the results of such crisis hospitalisation as follows: A one-year follow-up of 100 patients indicated that 16% were transferred for longer care following the crisis admission. During the first six months following discharge, 11% more were hospitalised and another 3% during the second six months. Thus at one year following crisis admission, 70% did not require further hospitalisation.

In summary, the programs reported by Langsley and Weisman reveal a high degree of effectiveness in application of principles of crisis intervention to population of patients with acute onset of psychiatric disability or acute exacerbations in the course of chronic disability. The findings indicate that this form of treatment does not merely postpone hospitalisation but it actually avoids immediate or long-term admission. In instances when the hospitalisation takes place subsequently, it is briefer. Review of reports coming from such programs also reveals a set of operational practices held in common. The basic operational principles were: (1) limited goals, with emphasis on the here and now; (2) immediate formulation and planning;

(3) focus on termination from the beginning; (4) involvement of significant others; (5) flexibility; and (6) team approach. Those who have pioneered in such crisis treatment do not pretend that it changes long established patterns of maladaptive behaviour but have simply managed to prove that in the face of such acute "psychiatric" crisis, brief treatment can help resolve the immediate problem, prevent further decompensation, chronicity and incapacity from institutionalisation and free up the individual and his family for more adaptive problem solving.

Evaluative studies of crisis intervention were reviewed from the vantage of primary and secondary prevention. Though few in numbers they represent concrete attempts at evaluating the promise and potentials of crisis intervention approach for mental health treatment. Clearly, crisis intervention still requires greater application and rigorous investigation before its ultimate "success" can warrant the support or abandonment of the approach. Its heuristic value and ultimate contribution to a causal explanation of behaviour might be limited, but at the risk of being trite, let's allow ourselves to at least say that it works!

CHAPTER V: THE RESEARCH PROJECT

A. STATEMENT OF THE PROBLEM

The focus of this research was Caplan's concept of crisis, particularly its utilisation in the clinical practice of crisis intervention. One crucially relevant assumption of the crisis model is that the individual is maximally susceptible to influence during crisis and minimal intervention at such times tends to achieve maximal effects. If this be true, then it should be possible to devise techniques for the assistance of such persons in crisis to enable the individual to avoid maladaptive kinds of response and to make the crisis an occasion for developmental gain. These techniques labelled by Caplan (1961) as preventive intervention should then be able to be applied to members of such crisis populations, the outcome being compared with that of a matched group of control subjects, at similar risk, who do not receive such intervention.

The field of crisis theory and its application has recently stimulated a number of mental health workers to investigate crisis of various types and in particular the process occurring during the crisis which may determine the outcome. Most of the work published on crisis however, has been of a clinical nature leading to a proliferation of techniques for intervention with little adequate assessment of these techniques.

As the review of literature in previous chapters has shown, studies of crisis have been largely descriptive with some predictive research. The main experimental work on intervention has been concerned with facilitating worry-work as preparation for predictable events and has mainly focussed on preparation for surgery. There are very few reported studies of intervention after a crisis event and those have

mainly concerned psychiatric emergencies.

The research problem was therefore to determine the effectiveness of crisis intervention with a non-psychiatric population, experiencing a crisis event.

In order to test the efficacy of intervention at times of crisis, a sample of people in crisis must be identified. Many researchers have specified the necessary and sufficient criteria for the incidence of a crisis, however, as the author has noted in the earlier chapters, there have been so very few efforts to objectify the criteria defining the incidence of a crisis.

Since in practice intervention ordinarily takes place after the identification of some precipitating event, on this basis, one could simply define a crisis state as inevitably following certain specific events. Alternatively, if one does not define crisis solely by the existence of some event in the life of a person, one should be able to distinguish, on the basis of their behaviour, those people who are in crisis from those who are not as a consequence of an event. However, this kind of discrimination is still difficult as no valid, reliable and quantifiable measure of the absence or presence of crisis yet exists. On this basis, until further refinement of the crisis concept is undertaken, the most appealing operational solution to the task of crisis definition remains that of defining a crisis in terms of a precipitating event which is generally judged to have a serious impact on the individuals involved.

In view of such definitional "fuzziness" of the crisis concept. the suggested "research" problem would only permit an answer to the key question about crisis intervention in relation to outcome if an event defined group who will nearly all be in crisis (i.e. stress and without an established effective means of coping) could be identified.

In terms of crisis events when two people react differently to similar situations we are faced with the "one man's meat is another man's poison" case and as such we are forced to define crisis not only in terms of the event but also in terms of the reaction to it. Such frequently studied potentially crisis-inducing events as marriage, first child, premature birth, retirement, child starting school etc. all have problems of deciding which subjects did or did not have an effective means of coping. Also, most of these do not create so severe a stress as to provide room for intervention to produce easily detected effects.

Fortunately, there are cultural and societal uniformities of "meat" and "poison" that are somewhat broader than the individual variations. Some external events or hazardous situations tend to produce crisis in the majority of cases so that the individual subjective nature of crisis is not an insoluble problem when studying these types of events.

Death is certainly a stressful event for other members of the family even at the end of a long illness, and the younger the victim the more severe the stress in most cases. First thoughts suggested a study of this event, however, there were several factors which made such an experiment unfeasible to execute. The main source of difficulty stemmed from the fact that it would be difficult to obtain enough cases in the time allocated for this study.

On the basis of such practical difficulty, the best type of event would be one that automatically creates unexpected multiple stresses and is fairly frequent. From the Canberra Mental Health Survey (Hennessy, Bruen and Cullen, 1973) such possible events include illness, accidental injury, motor-vehicle accidents and hospitalisation.

The effects of social and psychological stress on physical and mental health have been documented in numerous studies (Levine and Scotch, 1970; Dohvenwend and Dohvenwend, 1974). Most importantly, the findings suggest that undesirable events constitute the major contributor to the relationships. Traffic accidents and illness of self represent one of the most frequently reported undesirable life events creating severe demands on the persons involved.

In view of the above findings, admission to hospital for treatment of injuries sustained in a motor-vehicle accident appeared an ideal event to define a group in crisis. This category of events involves the following: (a) clear-cut, identifiable events; (b) multiple stresses such as injury, hospitalisation, separation from supports, financial problems in terms of unanticipated expenses, time lost from work and in some cases legal problems. Clearly, a motor-vehicle accident can compound such inter-related stressful events, creating severe demands on the person to accept and adjust to them in a context where he is separated from his normal supports as well; and (c) the event is unexpected and the subsequent stress situations would be novel for most subjects.

In sum, hospitalisation for road trauma was expected to severely disrupt personal adjustment as it involves damage to property, personal injury and hospitalisation. These are all known to be highly stressful expereiences and as such it is quite feasible that most individuals will perceive the occasion as a problem that overtaxes their own and their family's resources, since it is beyond their traditional problem-solving methods to resolve.

As a solution to the research problem outlined above, it was decided to draw a sample of individuals admitted to hospital for treatment of injuries sustained in a motor-vehicle accident (road trauma patients) and to compare a group receiving no intervention with other group or groups receiving some level(s) of crisis intervention.

The specific research problem was thus to test the effectiveness of crisis intervention with hospitalised road trauma patients.

B. HYPOTHESES

The study reported here represents an attempt to test the applicability of a set of propositions about the effects of crisis intervention treatment on the mental and physical adjustment of the individuals involved. More specifically, using the concept of crisis as a point of departure, it attempts to investigate whether short-term crisis-oriented social work intervention around the specific crisis of traumatic injury and hospitalisation can significantly decrease the risk of psychiatric illness, physical illness and social disturbance experienced by the individuals and their families.

Several hypotheses derived from crisis theory were tested. These hypotheses were chosen because it was felt that they are basic to the theory, have significant implications for the application of crisis theory, and because they appeared to be testable.

General Hypothesis I

That road trauma leading to hospitalisation constitutes a crisis.

The specific prediction based on this general hypothesis was: Subject's ratings of the level of distress following the accident, hospital admission and hospital treatment will indicate that unpleasant affect and cognitive disruption were elevated when compared by subjects to their prior experience.

General Hypothesis II

Prompt provision of an opportunity to review the experience of a traumatic crisis and to express the affect involved in the experience assists in the constructive resolution of the crisis.

The specific prediction based on this general hypothesis was: An opportunity to review the experience of injury and hospitalisation and express the feelings involved will result in an improved outcome three to four months later.

General Hypothesis III

(a) Provision of a brief crisis intervention treatment oriented to foster active coping with the emotional and practical consequences produced by a traumatic crisis makes a contribution to constructive resolution of the crisis additional to the contribution from the immediate review of the crisis experience;

(b) The above hypothesis (3a) applies only if the interveners function at or above a minimally facilitative level on Carkhuff's (1969 a) general facilitation scale.

The specific predictions based on this general hypothesis were:
(a) additional crisis intervention by a facilitative intervener will result in a better outcome three to four months later than will the immediate review alone;
(b) that different interveners who are all facilitative will produce no differences in outcome.

General Hypothesis IV
Crisis intervention will increase the supportiveness of the subject's social network, and subjects with more supportive networks will resolve the crisis more successfully.

The specific predictions based on this hypothesis were:
(a) subjects receiving full intervention will report more constructive and less destructive relationships with available significant others;
(b) within treatment conditions, subjects with better outcomes will report more constructive and less destructive relationships with available significant others.

C. METHOD

1. Subjects

The subjects were all male admissions treated for road trauma at Canberra Hospital between January and December 1973 who fitted the sampling criteria. The criteria for inclusion were as follows: (a) to ensure that all subjects faced disruption of work roles, age limits of over 17 and under 60 were set; (b) a minimal admission of

three days was required. Setting of a minimal admission period was necessary to ensure that all subjects were facing major stress both in terms of injury and hospitalisation. (c) Subjects were approached if their physician was agreeable to their inclusion in the light of their physical condition. The medical criteria were set up to protect the welfare of critically ill patients. Patients who died at the hospitals and one severely brain-damaged patient were excluded in this way.

All eligible subjects were approached and invited to participate in the study until a sample of 70 cases was obtained. In all 72 patients were approached; 2 declined and 70 participated. The sample thus should be representative of the population of such cases presenting to Canberra Hospital.

The social and demographic characteristics of the sample are presented in Tables 1 to 10 in Chapter VI: Results and are discussed further there. In general, compared to the Canberra male population, the sample tended to be young and low socio-economic status. Overseas born and minority religious affiliations were under represented. Half of the sample was married.

Allocation of subjects to treatment conditions was not completely random. The details of allocation are described below in the section on Procedure. The three treatment groups were equivalent in age, socio-economic status and nature and severity of injury.

2. Instruments

All subjects were evaluated on pre-treatment and post-treatment variables by the researcher. The following measures were used:

I Questionnaire

The interview guide is in two sections: Intake Interview and Follow-Up Interview and is presented in Appendices A and B.

(a) Intake Interview - The interview guide was designed to allow for an immediate review of the crisis event, description of subject's current behaviour and feelings, appraisal of problems as formualted by subject and needs defined by him as well as to establish the degree to which these problems had disturbed the subject's typical functioning level. The intake interview covers the following basic areas:

1. Demographic data

Information concerning age, marital status, number of children, country of birth, religion and socio-economic status was collected as these variables effect stressfulness and availability of resources. Such information also allows for a degree of confidence that the sample groups are comparable. This similarity of the groups that are being compared is, of course, essential. Unless they were similar groups one would be comparing the effects of different treatments on different populations.

2. Account of the Accident

The subject was asked to "tell" about the accident which allows for an immediate focus on the crisis situation, provides room to freely express and ventilate the subject's affective response

to the event and to ascertain the nature of the event in terms of its scope, severity, kind and persons involved.

3. Current affective disturbance connected with the accident and its sequelae

An account of the subject's "affective response" was obtained for each significant stage of the experience: (a) at the time of the accident or immediately following the accident; (b) during hospital admission; and (c) hospital experience as a patient. Each relevant section was designed in such a way as to offer a number of open-ended "lead" questions which were then followed by additional coded items to elicit further information necessary to make the final rating or assessment of the content. Feelings check list was consturcted for each stage of the experience and the subjects were asked to rate them as being either more or less valid as descriptions of their present behaviour and feelings. Such "feelings" areas were based on the clinical descriptions of crisis behaviour given by Caplan (1964), Rapoport (1962) and Miller and Iscoe (1963) and reflected such basic aspects of the crisis reaction as (a) feelings of confusion; (b) feelings of helplessness; (c) feelings of anxiety; (d) feelings of inadequacy and frustration; (e) feelings of dependency and so on.

Two questions typical of this aspect of the questionnaire were "What were your feelings at that time?" followed by "How serious and disturbing do you find it?" Each feeling category was then followed by a scale with a range of responses. Feeling states were rated on a five point scale anchored against the subject's previous expereience as a frame of reference. This allowed for meaningful assessment of the <u>intensity</u> of affective experiences

as a basis for concluding whether a subject was experiencing a severe crisis. It was assumed that reports of feelings as being "as strongly as I have ever felt it" (scored 4) or "stronger than I have ever felt it" (scored 5) indicated high levels of distress. Subjects were also asked what made them feel each effect and to identify specific circumstances that have triggered each feeling to assist in obtaining more specific and meaningful ratings.

4. Perception of the accident and its subjective significance

The subjects were asked to rate their appraisal of the accident situation in terms of perceived degree of risk to life and attribution of responsibility. Frequency of "intrusive thoughts" concerning the accident was measured and the degree of disturbance when recalling the accident was rated. The subjects were also asked to rate the degree of disruption in their lives created by the event and whether they perceived the event as a threat, loss or a challenge. Once again it was assumed that reports of the event as highly disruptive and threatening would indicate high levels of cognitive and affective distress consistently associated with crisis experience in the literature.

5. Current areas of stress

In line with the overall style of interviewing this section of the questionnaire allows for "open-response" questions with specific categories then offered, done to allow free expression as well as rigorous scoring. The subjects were asked to define their immediate needs in terms of emotional and practical support as well as outline the main areas of concern to them and any

specific problems that would have to be coped with. An attempt was made to partialise and focus the situation into six major institutional segments of the subject's life-space defining his major social roles. A check list was offered to allow for more specific assessment of the subject's levels of disorganisation of functioning in such areas as family relationships, social relationships, social activities, work relationships and so on.

6. Reaction to Hospital Staff

Subjects were asked to express and rate their confidence in doctors and nurses. A check was also made concerning the subject's need for information regarding their physical status and the degree to which such information was forthcoming or made available.

7. Sources of support

A preliminary check was made concerning sources of support available to subjects at this stage of the crisis experience. Subjects were asked to list any persons who have been of considerable comfort and support to them thus far and whether anybody has let them down since their accident.

(b) Follow-Up Interview

This section of the questionnaire was designed to: (a) discuss and assess the subject's cognitive and affective disturbance connected with the accident three to four months after the event took place; (b) identify areas of stress and sources of help available to subjects during this period; (c) measure the quality and quantity of social support throughout the crisis experience; and (d) to measure pre-accident stress areas and their management.

In more specific terms the interview guide covers such areas as:

1. Self assessment of current situation

The nature and duration of "vulnerable" state following the crisis event is ascertained through simply asking "if things got better" since the accident. The subject is allowed an open response and is free to comment on any aspect of his current condition. It was assumed that reported improvement since the event or lack of it will correlate with the other outcome measures used in this study.

2. Symptoms of traumatic neurosis

Symptoms of "emotional shock" produced by traumatic experience such as spells of uncontrollable emotions, sleep disturbances and some loss of cognitive abilities are typical of the temporary personality changes that follow an episode of harrowing personal danger. These symptoms with other manifestations of extreme physiological arousal are viewed as the result of psychological trauma which denotes a state of emotional shock induced by severe stress or frustration. Studies of disaster survivals also indicate that even in the most stable personalities, the acute symptoms of traumatic neurosis will usually occur at least temporarily following direct involvement in a disaster. The coneept of working through trauma to regain mastery has been applied in such peacetime disasters. The assumption being that if a person evades all reminders of his harrowing experience, he is most likely to be left with chronic traumatic neurosis. Thus disaster victims are encouraged to verbalise their recent distressing experiences, and special efforts are made to provide them with emotional and practical support so as to help re-establish their sense of confidence

in the world about them. Successes during World War II in treating traumatic neurosis by recall and sharing of the emotions experienced further suggested that outcome may be better for the group who receives such form of intervention than for the group that does not. It was also assumed that the symptoms produced by road accidents would not be fundamentally different from those seen in people who develop traumatic neurosis following war experience or peacetime disasters.

A check-list for symptoms of traumatic neurosis was constructed with each "feeling" state being rated on a five point scale anchored against the subject's previous experience as a frame of reference. Another important type of reaction-increased sensitisation to threat cues was-rated by the subjects. On the basis of the learning principles one would expect a person who had undergone a terrifying episode, to show characteristic changes in his emotional reactions to cues that were present during the danger experience.

3. Areas of Stress and Sources of Help

Once again the subjects were asked to outline any areas of concern to them and describe the specific problems involved. A check-list used in the intake interview section of the questionnaire was offered which partialises problems into specific areas connected with major social roles. The subjects were further asked to indicate to whom or where did they turn to with the problems they have mentioned. A check-list of hierarchy of assistance seeking was constructed ranging from self or no-one to contacts with more impersonal formal organisations. The "hierarchy of assistance seeking" was constructed to include the two major

categories of help-givers to whom a person may turn when confronted with a crisis: (a) immediate social network of family and friends defined as primary source and (b) professional personnel defined as a secondary source of help-seeking. Both of these sources are not mutually exclusive and both are frequently employed by the same people. The subjects were also presented with a list of professional "care-givers" in the community and asked to indicate whether or not they have come in contact with such persons since their accident and if so whether or not such contacts were perceived as helpful or unhelpful.

Lindenthal (1971) has suggested that one way of understanding the interdependence of individuals within the social structure is to look at the constellation of "others" to whom a person turns when confronted with crisis and in need of support. His work has provided some evidence to suggest that the choice of whether an individual seeks out a primary or a secondary source of help is of great potential importance in estimating the "quality of fit" of a given individual into his socio-cultural environment. Lindenthal's study of the relatonship between various forms of crisis, psychological status and the perception of the helpfulness of those surrounding the individual suggested that the impaired (people who fell into the "psychologically impaired" end of the psychiatric symptoms scale used) when confronted with crisis seem to perceive both primary and secondary sources of help as more useful than the unimpaired. Furthermore people who fell into the "psychologically impaired" category were more likely to seek secondary sources of help than the unimpaired ones. Thus in general, when an individual turns to

others in situations of crisis, it can be either an exercise in coping, well within the adaptive capacity of the individual, or a measure tinged with desperation behind which lurks breakdown.

4. Social Support

Extensive research has identified dimensions on which the interview behaviour of effective and destructive counsellors and psychotherapists differ (Berenson and Carkhuff, 1967; Carkhuff, 1969, 1971; Carkhuff and Berenson, 1967; Rogers et al, 1967; Truax and Carkhuff, 1967). The best validated of these dimensions have been found to differentiate between effective and ineffective teachers (Aspy, 1969; Aspy and Hadlock, 1967; Berenson, 1971; Hefele, 1971; Carkhuff and Friel, 1969; Stoffer, 1970; Truax and Tatum, 1966) between parents of children whose behaviour is prosocial and antisocial (Becker, 1964; Bierman, 1969); and between friends of well and poorly adjusted college students (Shapiro and Voog, 1969). The three key dimensions as defined by Carkhuff (1969) are empathic understanding, respect and constructive genuineness. Carkhuff (1967, 1969, 1971) has suggested that these are the basic dimensions for discriminating between constructive and destructive human relationships. He suggests that a person's life experience involves a series of choice points (or crises) which may turn out for better or for worse. A person who has available at a crisis point significant others who are more empathic, respecting and genuine has a good chance of resolving the crisis for the better. Conversely a person whose significant others misunderstand, are rejecting of the person and the person's feelings and are phony or destructive in their openness is likely to resolve the crisis for the worse.

(Carkhuff, 1969, Vol. 1, p.23). Egan (1970) analysed the concept of "support" and concluded that a supportive relationship is one characterised by empathy, respect and genuineness.

On this basis, the quality of support was assessed by asking subjects whether each of a list of potential significant others was available during the crisis period. For each one that was available, subjects were asked to rate that other's response to the subject on three rating scales (see Appendix B, Outcome Interview). The scales were adapted from Porritt's (1973) simplified versions of Carkhuff's (1969) scales of empathic understanding, respect and constructive genuineness. Each response category for a scale was assigned a numerical score and the scores summed for a given significant other.

5. Pre-crisis stress areas and Pre-crisis life events. There is an increasing body of research pointing to the role of life-stresses as a primary cause, a precipitating cause, and an exacerbating agent in specific maladaptive behaviours including a wide range of physical and mental disorders. Throughout such literature most studies have clearly demonstrated and documented the association between a subject's life stress, life changes, personal loss and other measurements of social and personal upheaval with the subsequent recognition of "illness" in that individual. The work of Holmes, Rahe and associates (1964, 1966, 1967) which linked the onset of illness to measureable life changes, provided many researchers with a useful framework to determine if life changes (bereavement, divorce, job change, financial difficulty, etc.) and the degree of subsequent adjustment they require are meaningfully related to the accident

process. Their research indicated that the greater the number of life changes and the greater the degree of adjustment required, the higher the risk of illness and the greater the likelihood of major rather than minor illness. Thus, if phenomena as abstruse and etiologically diversified as human illness are indeed related to life changes, then these changes may well modify critical emotional and mental functions that directly influence behaviour, including driving behaviour. Work by Selzer and Vinokur (1974) supports the concept that life events are related to traffic accidents. They have demonstrated that life-change events, current subjective stress phenomena, and the resultant changes they impose are an important factor in the traffic accident process. Indeed, these factors appear to be statistically more important than the demographic, personality, and social maladjustment variables that have previously been the focus of behavioural scientists.

Subjects answering the Follow-Up questionnaire were given a list of 37 "crisis" events and asked to report which of these they had experienced during the 12 months prior to the accident. The number of stressful events were obtained using the list reported by Hennessy, Bruen and Cullen (1973) in Canberra Mental Health Survey. This was done for comparative purposes using rates of events reported for Canberra population as normative figures. The subjects were further asked to report any major distress experienced in various life contexts classified by social role area such as work, marital, personal and social. The pre-accident stress areas and life-events were included to ensure that there were no biassing differences between groups as response to the stress of injury and its sequelae might be a function of differences in prior stresses.

II Standard Tests

(a) Langner - 22 Item Scale (Appendix C)

The main mental health measure used in this study was the Langner "22 item" Screening Score of psychiatric symptoms indicating impairment, which was developed during the course of the midtown study of mental disorder in Manhattan, New York City. This instrument is described by Thomas S. Langner (1962) and has been subjected to close scrutiny by Langner and Michael (1963), Dohrenwent and Crandell (1970), Phillips and Clancy (1970) and Manis (1963). The 22-item scale consists of 22 closed-ended questions which ask for self-reported psychological, psycho-physiological and physiological type complaints. Items were selected mainly by their ability to discriminate between "known ill" and "known well" groups (Langner, 1962) with certain exceptions: specifically, the 22-item scale was not constructed to detect organic brain damage, mental retardation or sociopaths. Scale scores are derived by a simple summation after item responses are dichotomised into "pathognomic" and "non pathognomic" categories. Higher scores purportedly indicate mental illness and there are three points of discrimination dividing respondents into the categories of "well", "borderline" and "sick".

In Langner's study, the dependent variable was a mental-health rating based on the clinical judgements of two psychiatrists who independently reviewed an extensive array of psychological information secured in interviews with sample respondents. Manis (1963) has used a similar validating approach with five "known groups" and found that the scale failed to measure the relative positions of individuals on the scale and could only be thought of as differentiating between the average health of groups. Berkman

(1971) used an Index of Psychological Well Being (items drawn from those used by Bradburn and Caplovitz, 1965, to measure psychological wellbeing in their studies of happiness) as the dependent variable and his findings suggest that both the "22 item" scale and the Index of Psychological Well-Being pertain to essentially the same psychological dimension. Gaitz and Scott (1972) selected "22 item" scale and the Affect Balance Scale developed by Norman M. Bradburn (1969) as instruments to measure mental health in their survey research. Varying degrees of correlation were found between the two instruments used, confirming that the instruments measure similar but not identical aspects of mental health. Seiler (1973) offers a comprehensive literature review on the use of the "22 item" scale in field studies of mental illness and concludes that the scale can be viewed as measuring psychological stress or disturbance in response to stress and is not necessarily specific to psychiatric neurotic illness.

Throughout the "22 item" scale's history there are those who have defended its use, those who have criticised it, and others who have fallen somewhere between. Nevertheless, the scale is important as a pioneering epidemiological instrument and because it is widely used for the detection of "cases" in field studies of mental illness. In addition, it is conceptually similar to a genre of instruments used to perform the same or similar functions e.g. the Health Opinion Survey (Macmillan, 1957) and the difficulties noted for the use of it are equally appropriate for the other instruments.

This instrument was selected due to the availability of results on this scale for Canberra population. Norms for Canberra population corrected for age, sex and socio-economic scale were used for comparative purposes.

(b) Bradburn - Affect Balance Scale (Appendix D)

To measure the dependent variable, psychological wellbeing, Bradburn's Affect Balance Scale was employed (Bradburn, 1969). Since the concern was with the normal aged population living in the community and their reactions to the stresses and strains of daily living, this instrument was selected as the most appropriate operationalisation of mental health, as it reflects a balance of two independent dimensions of subjective life experience.

The Affect Balance Scale was developed in an attempt to apply a social-psychological perspective to the study of mental health in normal popualtions. The fundamental question underlying Bradburn's research concerns the most fruitful way to understand the psychological reactions of normal individuals to the stresses and strains of everyday living. Bradburn (1969) makes it quite clear that his studies were not concerned with the diagnosis of psychiatric cases whether treated or untreated, but rather with the problems that ordinary people face in the pursuit of their life goals. The scale is a combination of two dimensions of psychological well-being, thus affording three affect measures - the Positive Affect Scale, the Negative Affect Scale and the Affect Balance Scale. The positive score is the sum of five positive affect responses while the negative score is the sum of five negative affect responses. Bradburn (1969) hypothesises that the measures of positive affect and negative affect are independent of each other but that the best indicator of a person's psychological well-being is the difference between the positive and negative scores, called the Affect Balance Scale. He further relates the negative affect score to more traditional mental illness concepts, such as work or marriage friction, nervousness, anxiety and depression, while the

positive affect is related to a person's socialisation, his involvement with and enjoyment of those around him.

The Affect Balance Scale and its two sub-scales, Positive Affect Scale and Negative Affect Scale, were validated in a number of studies using the "known group" analysis and other independent criteria (Gaitz and Scott, 1972; Beiser, 1974; and Moriwaki, 1974). These studies support the utility of the Affect Balance Scale in non-institutionalised resident populations and help to demonstrate the conceptual and methodologic importance of studying the affective components of well-being separately and as they interact, rather than assuming that well-being can and should be considered as an unidimensional, global construct. Results from the "known groups" analysis (Moriwaki, 1974) also indicate that the Affect Scales discriminate significantly the normal groups from the psychiatric outpatient groups. Mean scores for the global measure of psychological well-being and positive affect were significantly higher for the normal subjects while the mean score for negative affect was significantly higher for the psychiatric outpatients. In general, the significant correlations between Affect Balance Scale and various other adjustment scales support its validity as a measure of mental health.

(c) Langsley - Symptoms Scale and Job Functioning Scale (Appendix E & F)
Both these scales are part of the Personal Functioning Scale developed by the Family Treatment Unit, University of Colorado School of Medicine and reported by Langsley and Kaplan (1968). The Symptoms Scale is a 17 item scale, similar to Langner, with each item rated on a five point frequency scale. The Job

Functioning Scale is a five item scale covering occupational adjustment and it applies only to those who had returned to work. Both scales were used and validated in Langsley's family crisis studies to detect treatment effects of crisis intervention and have shown to be sensitive to response to such treatment.

(d) Maddison - Health Questionnaire (Appendix G)

The Health Questionnaire was designed to measure the prevalance of health deterioration following bereavement as part of a study carried out in the Laboratory of Community Psychiatry of Harvard Medical School in 1964-65. The questionnaire was used in a similar study involving a sample of Australian population (Maddison and Viola, 1968) which adds to its validation for the Australian context. It was designed so that the only items scored were those which recorded a change in complaints and symptoms in the period following the original crisis event. In this sense, the only health problems scored are those which were either new or substantially more troublesome during this period. The questionnaire has two parts, the first consists of a list of symptoms and complaints covering a comprehensive range of neurological, dermatological, gastro-intestinal, respiratory and psychological symptoms, the second section covers any changes in general habits such as drug intake, alcohol intake and smoking.

Since previous research (Maddison and Viola 1968) has shown this questionnaire to detect changes in health following a crisis event, it was included and adapted for this study.

3. Experimental Design

The design of the study was necessarily a compromise between the principle and practice. The problems which had to be dealt with will be discussed and then the design solutions which were adopted will be described.

(a) Design problems

The major variables involved in a stressful experience and its aftermath are, schematically, as follows:

A		B		C		D		E
Event	—	Significance for person	—	Psychological adjustment or coping capacity	—	Amount of support	—	Outcome

The investigation of this process by conventional research method is severely limited for the following reasons:

1) If a stress is unpredictable then it is not possible to measure C beforehand.
2) If the stress is predictable there is the difficulty of locating such cases, as well as the variability in the period between the beginning of the stress and our awareness of the case.
3) In retrospective studies, the extent of D can modify (distort) the impact as reported in B.
4) D is difficult to measure especially in terms of the quality and intensity of support available.
5) Selective factors could be operating among those who receive more support e.g. those who exhibit courage, who don't whinge, or fall apart, may be more attractive people whom we want to support. Hence the better outcome for those with support could, with some designs, be attributable to an unknown extent to personality factors.

A suggested design which takes account of these difficulties is to select a population of people who have been subject to unpredictable stresses which compel them to seek professional help (and so come to our notice) and subsequently to provide for a randomly chosen half whatever support is needed to bring the total quality/quantity up to some acceptable level and finally to look for differences in physical and mental health outcome between the two groups some time later.

Although the above design was chosen for the purpose of this study there were a number of problems which require further discussion.

1) The ideal design would be a pre-post assessment of adjustment with subjects randomly allocated to treatment and control groups. Ideally, adjustment would be assessed before the accident, immediately after and on follow-up, with measures of the process of response to the crisis. Various constraints of time and resources prevented this ideal being met. Firstly, as the event chosen is unpredictable a pre-event assessment would require following a large group for a period of time until a sufficient number had experienced the event. Time did not allow this. Thus assessment, shortly after the event and at follow up was accepted. Secondly, process measures require regular contact throughout the period of crisis to final follow-up. This was not done as resources were insufficient. Also such regular contact might in itself constitute an intervention and blur outcome differences.

2) Ideally, numbers in each treatment condition should be equal and allocation to groups random throughout the time period of intake to the study. The flow of suitable cases was insufficient to collect an adequate number to allocate randomly as obtaining access

to the cases required several months' negotiation with the various authorities involved. Thus, the "no intervention" group (Delayed Contact group) was obtained by locating suitable subjects who had been discharged before the collection of the other subjects commenced. Intake and Outcome interviews with this group were conducted concurrently with recruitment of other subjects, conducting Intake interviews and allocation to treatments. This introduces the possibility that the Delayed Contact group differed in some meaningful way determined by seasonal effects from the other groups. It also allows for distortion of recall to influence certain parts of the data (i.e. recall of the accident event, hospital admission and subsequent experience as a patient). Demographic data and Intake measures were examined to check on this possibility.

The main comparison on outcome measures was between the Delayed Contact and Full Intervention groups. The sample sizes for these groups were set at 30. Given the time available, the case flow and the fact that the third group (Immediate Review) was included for control of certain selective factors only, the size of this group was set at 10.

3) Ideally, the study would have included: equal numbers of each sex; all admissions following accidents; and a representative distribution on age and socio-economic status. Too few women were admitted with road trauma to allow for equal representation of the sexes, thus the sample was limited to males. To ensure that all subjects faced disruption of work roles, age limits of over 17 and under 60 were set. The numbers available did not allow quota sampling so the sample was not representative of the general population in age

and socio-economic status (see Chapter VI: Results).

4) The time period for the follow-up was set at three to four months after the date of admission. Caplan (1964) suggests that a crisis is usually resolved within this period. A follow-up at 12 months would have considerably strengthened the conclusions as this would allow differential rates of return to work to emerge and would reduce any "halo" effects among those who received intervention. The time available to the author prevented longer term follow-up.

5) "Blind" outcome assessments by an interviewer, who would not know what conditions the subjects were assigned to, would have been desirable. This was not possible as the author had to conduct such outcome interviews and the hospital insisted that the in-hospital Intake interviews be conducted by the author only.

6) Three different social workers familiar with crisis intervention were recruited to conduct the full intervention. Preliminary sessions were conducted to standardise their approach so far as possible while allowing for some variations. Crisis intervention is not a tightly prescribed set of procedures and the use of more than one worker enhances ecological validity. In the light of work on therapist skill (Cartwright, 1956; Cartwright and Vogel, 1960; and Truax and Carkhuff, 1967) which seems to indicate that therapist's characteristics were related to outcome, the Communication Skills of those intervening were measured but not manipulated. The intervener was seen as a nested factor in the crisis intervention treatment used and the subjects in the Full Intervention group were allocated randomly to each intervener so as to provide

three groups of 10 to allow examination of the therapist effect.

7) To obtain measures of the severity of distress shortly after the accident event without extended discussion of the subject's feelings and experiences was impractical as co-operation would have been poor. At such times the desire to discuss the event is very powerful. Conducting such a discussion would in itself be a form of intervention. Reports of treatment for traumatic neurosis suggest that recall of the traumatic event which expresses the associated affect may be an affective form of intervention. Thus, an "after-only" design for assessing outcome was selected. Data regarding the early parts of the crisis experience was obtained from all subjects, with some interviewed immediately after the key event, and others asked to recall it at follow up. To test the effects of this interview, a treatment group which received this immediate review and no other intervention, was included in this study.

Thus the design chosen included three conditions with an after-only assessment of adjustment. The departures from the ideal design result in the study being a quasi-experimental design (Campbell and Stanley, 1969).

(b) Treatment Groups

This study compared outcome on a variety of measures of personal distress, illness and well-being for three groups. Each of the groups was exposed to different levels of intervention thus allowing for two experimental groups and a control group. The three groups are as follows:

1) The Delayed Contact (D.C.) group (n=30) - assessed with standard Intake Interview and Outcome Interview, three to four months after admission. This group received no intervention apart from what would normally be provided.

2) The Immediate Review (I.R.) group (n=10) - assessed with the standard Intake Interview within 2-3 days of admission and the Outcome Interview 3-4 months later. Thus, the Immediate Review group was given a chance to recall and share the emotions experienced following their accident but received no other crisis intervention.

3) The Full Intervention (F.I.) group (n= 30) - assessed with the standard Intake Interview within 2-3 days of admission and the Outcome Interview 3-4 months later. Subjects in this group were assessed identically to the Immediate review group but in addition received the full range of crisis intervention, as was appropriate to the needs of the case, from one of the three social workers.

To ensure that all subjects had experienced distressing degrees of stress as a result of their accident, all were interviewed about the accident, hospital admission and subsequent experiences as a patient. The Delayed Contact condition was only interviewed at follow up which ensures no confounding of measurement with intervention. The remaining subjects were interviewed about their experiences within 2-3 days of admission as the design of this study called for a one-time hospital room interview by the author. Although the hospital interview was primarily designed to ensure participation and to allow for data accumulation it could nonetheless be argued that empathic listening, during such one-time session, allowing ventilation and abreaction could

produce a degree of relief of subjective distress. Life disruption and subjective discomfort are sufficiently gross in crisis so that any type of change could be readily achieved even through single-session crisis interview. Although, crisis intervention theory advocates additional intervention to mobilise social support, provision of practical support, and continuing the process of working through that may be initiated by an immediate crisis interview, a review of the literature has failed to reveal any published work concerned with the process of single-session crisis interview. In the light of the above reasoning, the subjects were randomly allocated into Full Intervention and Immediate Review groups with the latter receiving no further crisis intervention. This design allowed for pre-testing of whether one contact session with empathic listener would be sufficient if carried out at the point of an emergency.

To recapitualte, the design allowed for a range of levels of intervention using three different treatment conditions:

a) Delayed Contact group - no intervention

b) Immediate Review group - one-session crisis interview only

c) Full Intervention group - one-session crisis interview plus crisis intervention from one of the three social workers

Successes during World War II in treating traumatic neurosis by recall and sharing of the emotions experienced suggested that outcome may be better for the Immediate Review group than for the Delayed Contact group. The addition of action-oriented crisis intervention to mobilise practical and emotional support was expected to result in the best outcome occurring in the Full Intervention group.

c) Overview of design

The basic design was a quasi-experimental one-way factorial after-only design, with three levels of intervention and multiple outcome measures.

There were three treatment groups. The experimental sample consisted of 70 cases. The sample size for the Immediate Review group was 10 and for the Full Intervention and Delayed Contact group 30. The design is thus a one-way factorial design with unequal groups.

Nested within the Full Intervention group is a one-way factorial design with three groups of n=10 to test for therapist effect.

Additional data was obtained to check whether subjects were distressed, to check the range of stresses operating and to determine what might predict differences in response to a level of intervention. In particular, levels of stress, of distress and of social support were assessed as potential predictors of individual differences in outcome.

In terms of design, the nature of the dependent variable (outcome) raised many questions. Crisis theory speculates that intervention returns the individual to his pre-crisis level of coping and adjustment and since the nature of the event chosen did not allow for measure of the pre-crisis adjustment levels one could not speculate on this. All that could be shown is that the treatment groups differed significantly on certain measures of physical and psychological well being. Thus outcome was assessed on six standard scales spanning the domain of health and adjustment, and on some specially designed measures of traumatic neurosis and of social support.

In summary the experimental design and the time sequence involved is as follows:

Time Sequence

Accident	3 months	Follow Up and Outcome Assessment

Treatment Sequence

For Delayed Contact group

Accident	3 months No contact	Follow Up: Intake Interview plus Follow-up Interview and Outcome measures

For Immediate Review group

Accident	3 months Initial Assessment - No further contact	Follow Up: Follow up-Interview plus Outcome measures
	(Intake Inverview)	

For Full Intervention group

Accident	3 months Initial Assessment + Social work Crisis Intervention	Follow Up: Follow up--Interview plus Outcome measures
	(Intake Inverview) (Intervener A, B, or C)	

4. Procedure

(a) Intervention and Training

Crisis intervention is not a tightly prescribed set of procedures although as one reviews the recent literature on crisis intervention therapy, a number of principles and techniques stand out as being commonly mentioned by all writers. The basic precepts of crisis treatment have already been listed in previous chapters and need not be recapitulated. One might emphasise again that the primary need at such time is seen as twofold: to make an immediate professional assessment of the current situation, and to provide prompt and direct intervention aimed at alleviation of distress and restoration of equilibrium.

The actual techniques employed in this study were based on the model of crisis described by Caplan (1964), which contains guides for such intervention. Basically the "crisis intervention support" provided by the social worker was intended to offer help along the following two lines:

1) To provide someone who will listen to how the client and his family feel about the accident and its consequences, pointing out alternative means for coping with these feelings. Here the type of support necessary may be to help the individuals invilved establish and face the facts of their situation rather than indulge in speculations based on uncertainties and misunderstandings which are often not voiced. Patient's irrational attitudes or negative responses may need to be placed in a rational context by clarifying the natural history of such reactions and attempting to partialise and focus the situation

in workable terms. Caution needs to be exercised by helping the client to confront the crisis in manageable doses.

2) To provide information about sources of help in the community for handling whatever practical problems may arise. Here the aim is to help the client and other people involved to accept assistance and to smooth the path for obtaining it. Involvement of significant others in the clinet's role network is encouraged in order to maximise the amount of support apart from what would normally be provided.

Although the concept of crisis presents care-giving professionals with a remarkable opportunity to deploy their efforts to maximum advantage in influencing the mental health of others, crisis intervention would provide a major challenge to even the most experienced clinicians. In terms of this study, the natural and safe course was to involve professional individuals familiar with crisis intervention techniques rather than train paraprofessional caretakers to undertake the role of intervener.

For many years social work practice has involved the dynamics implied in crisis theory and crisis intervention - long before the term "crisis" was coined by other mental health professionals. Social workers have always worked in a "person-in-a-social" configuration context and, in this sense, crisis intervention has much in common with traditional social work practice and its emphasis on problem-solving activity. Both the crisis intervention and social work approaches assess the problems in terms of the client's social status and use environmental manipulation as a legitimate dynamic tool to help people improve their

ability to deal with problems. The social worker comes from a clinical setting and has acquired knowledge of intrapersonal emotional factors operating in such situations. His special expertise, however, has to do with the social agencies, be it an informal one like the family or more formal ones like the court, welfare agencies and so on. This basic community and social orientation has provided the social worker with invaluable skills that are needed in crisis intervention, where one involves the supportive network of the individual and restores him to the community. The acquired knowledge of intrapersonal, emotional and environmental factors combined with the expertism in knowledge of community networks and agencies makes him an invluable helper in a crisis-intervention program. So it should not come as a surprise that social workers were proposed to fill the role of a crisis-intervener in this study.

Three social workers familiar with crisis intervention techniques were recruited to conduct the full intervention sessions prescribed for the Full Intervention group by the design of this study. Preliminary sessions were conducted to standardise their approach so far as possible while allowing for some variation. This was desirable as crisis intervention is not a tightly prescribed set of procedures and the use of more than one worker enhances ecological validity. A further control here was to provide each intervener with a specially developed interview record (c.f. Appendix H) spanning the domain of possible intervention areas. The intervention process was divided into personal, social, financial, work, family and social agencies areas with the interveners reporting on each section in terms of: what was ventialted and reviewed; was it resolved; were action possibilities defined; and what action should follow.

The crisis intervention approach was standardised along the following discussion points:

1) Introduction to client and family

As soon as a subject was allocated by the random selection process into the Full Intervention conditions, he was offered social work support and told that such help will be available immediately. The initial contact always took place in a hospital setting and usually within 2-3 days of admission. The subjects were told on introduction that "the university social workers were available for consultation as part of our service to you for taking part in this study." This was done to keep the subjects "blind" as to the real purpose of the investigation without violating ethical standards.

2) Number and spacing of contacts

In terms of design, a contact limit was set on number of intervention sessions. A miminum of two and maximum of eight one hour contacts were anticipated. The intervention contacts were terminated at any stage of that range if both parties agreed on help being no longer required or the maximum ceiling of eight contacts was reached. The termination of contacts along such lines was planned from the very beginning of the treatment relationship.

For the first two or three days, contacts were maintained on a daily basis with the remaining sessions determined by subject's needs.

3) Defining the crisis as a Family Problem

From the time that the crisis intervener has his first contact with the subject, the idea is conveyed that the problem involves all the family members. The therapist reinforces this definition of crisis as a family problem by immediately calling together all available household members for a meeting. The therapist who has gathered the family together asks initially for a statement of the present problem. Although this may be presented from different points of view and consequently differing stories may emerge, a clearer picture of the immediate situation is gained from seeing the whole family. This meeting also sets the stage for an approach involving the whole family. The goal was to gain entrance into the family within the first twenty-four hours following the introduction, to place responsibility for the subject's problems on the family and to relieve the immediate tension sufficiently to proceed with work on the "family" crisis.

The treatment of "isolates" (no family or significant others) was discussed and a decision was made to refer and encourage integration of such cases into a social network.

4) Referral process

It was anticipated that many of the subjects and families would experience a variety of problems - vocational, financial, marial, etc - that need help beyond crisis intervention. For such cases the referral process becomes a very significant aspect of the crisis intervention. A decision was made that when the need to refer arises it should preferably take place at the <u>end</u> of crisis treatment. The referral should be a live process and not a mere

formality such as writing a letter and giving a name and address to the subject.

In general terms the crisis interveners adhered to the following process:

1) Subject's current situation was discussed, subjective significance of situation explored and feelings ventilated.

2) Appraisal of the current situation, in workable terms, was verbalised by the intervener and a time limited treatment plan set up.

3) Involvement of significant others was considered and agreed upon.

4) The use of other community resources to support treatment plan was reviewed and referrals discussed.

(b) Overview of Procedures

This study assumes that traumatic injury resulting in some days admission to hospital through casualty is a crisis situation for the patient and his family. It was proposed that an appropriate class of subjects be defined (e.g. traumatic injury, 3 or more days admission expected by the admitting physician) and their co-operation sought for participation in the study. Procedures for contacting subjects which preseve confidentiality were set up and the purpose of the study was explained in the following manner "... we are concerned with the serious personal difficulties which sometimes have to be faced by

people who have had an accident ... we feel that too little is known about the many different situations in which people find themselves at this time, and we have been trying to understand what is encountered by people like yourself ... we are currently undertaking a research project with the co-operation of the Hospital in order to gain some information which would help us to understand better the problems involved." Initial assessment and outcome assessment measures, including specification of predictor and outcome variables were developed. Decisions were made regarding allocation of cases into treatment conditions and the degree, type and limits of crisis intervention were outlined. A variety of measures of personal distress, illness and psychological well-being were used to compare outcome for experimental groups.

Three social workers familiar with crisis intervention techniques were recruited to conduct the full intervention. In the light of work on therapist skill, the social workers were tested on a specially designed form of a taped Communication Index (Carkhuff, 1969 a). The tape presented eight simulated statements, four by a "patient" and four by the "patient's wife". Written responses were rated on Carkhuff's Facilitation Scale by two independent raters known to perform adequately on Carkhuff's Discrimination Scale. All three social workers performed above the minimally facilitating level identified by Carkhuff (1969 a). Thus, the communication skills of those intervening were measured but not manipulated.

The results were analysed by applicaton of chi-square to contingency tables. Significance is defined at the .05 level.

CHAPTER VI: RESULTS

A. Test of Significance

Analysis of variance is the obvious statistical method. The distribution of many of the variables were, however, highly skewed or multi-model. Application of analysis of variance to such distributions is unwise (Winer, 1962). The large number of ties produced by narrow score ranges on many variables made ranking techniques inappropriate. Between group differences were therefore tested for significance by application of chi-square to contingency tables. Each dependent variable was divided into two or three categories as nearly equal as possible and the effect of treatment condition on frequencies in each category assessed by computing chi-square or 2 or 4 d.f. as appropriate.

In some instances, where marginal total were uneven, several expected frequencies were smaller than desireable. In instances where these cells of the table made minimal contributions to chi-square (as the cells for the Immediate Review condition usually did) no correction or combination of categories was necessary and none was applied. Where such low expected frequencies made substantial contributions, categories were combined to ensure the relationship was not spurious.

Although analysis of variance could properly have been applied to some variables, it was judged preferable to adopt a uniform approach throughout. Significant relationships were usually so strong as to leave no doubt of their importance.

B. Sample Characteristics

1. Demographic

(a) Age and S.E.S.

The three experimental groups were compared for age and social economic status (cf Tables 1 and 2). The experimental groups were not different in age and social status. The sample overall was younger than expected for a random sample of male drivers.

The subjects were classified into socio-economic status (S.E.S.) categories according to the scale used by Bruen, Hennessy and Cullen (1973) for the Canberra Mental Health Survey. No S.E.S. data was available from the Canberra Mental Health Survey for 18 year olds. None of the accident sample was older than 43. S.E.S. may have been low because a young sample had not worked long enough to enter classes 1 and 2 in proportions typical of the population. Thus, age corrections for expected S.E.S. were applied by using the distributions for ages 19 - 29 and 30 - 49 (cf Table 3). In both these groups sample S.E.S. was lower than expected. In the younger groups classes 3 and 4 were up, while classes 1 and 2 were down compared to the Canberra population. In the older groups, class 1 was down, class 2 up and classes 3 and lower were as expected. Combining the age groups, class 1 was down, class 2 as expected and classes 3 and below were up compared to the population. Including 18 year olds increased this trend.

It can be concluded that there is a highly significant departure of the sample from the S.E.S. distribution found for males in the Canberra Mental Health Survey. It is as if wherever a class 1 would appear in a random sample, a class 4 or 5 was drawn instead. Considering the youth of the sample, there were surprisingly few students, although this could be a chance effect. There were too many class 4 and 5 and too few class 1 subjects for this sample to be considered random.

(b) Marital Status

The overall sample were almost evenly divided between married and single (cf Table 4). The treatment condition were significantly different in the proportions married with DC subjects more often single (63%) than FI subjects (30%).

(c) Country of Origin

Table 5 shows there were no differences between conditions in country of origin. The majority were Australian born.

(d) Religion

Table 6 shows no differences between conditions in religious affiliation. The majority were Protestant and most of the others were Roman Catholic. Eleven percent were of other or no affiliation.

TABLE 1

AGE DISTRIBUTION BY TREATMENT CONDITION

Age	Condition			
	DC	IR	FI	Total
40+	2	-	1	3
35-39	2	1	2	5
30-34	6	-	3	9
25-29	6	4	3	13
23-24	1	1	4	6
20-22	4	2	5	11
19	2	-	2	4
18	7	2	10	19
Total	30	10	30	70
Mean	25.8	24.9	24.3	25.0
S.D.	7.22	6.34	6.72	6.73

Comparing the groups DC and FI by a median test, chi-square, 1 df = 1.07 The sample standard deviations are very similar. It may be concluded that the samples do not differ in age.

TABLE 2

SOCIO-ECONOMIC STATUS BY TREATMENT CONDITION

SES	Condition			
	DC	IR	FI	Total
1	-	-	-	-
2	5	1	5	11
3	11	4	10	25
4	8	4	9	21
5	5	1	6	12
6	1	-	-	1
Total	30	10	30	70

Chi-square = 0.07, 2df, n.s.

CODE:

S.E.S. 1. Professional or High Managerial

2. Semi-professional

3. Skilled

4. Semi-skilled

5. Unskilled

6. Unclassified (e.g. Full-time student)

TABLE 3

SES BY AGE FOR SAMPLE AND POPULATION

		Observed Frequency			Expected Frequency		Contribution to Chi-Square		
SES	AGE	18	19-29	30-49	19-29	30-49	19-29	30-49	19-49
1		-	-	-	5.4	5.2	5.4	5.2	10.6
2		-	2	9	7.9	4.1	4.4	5.9	0.8
3		1	17	6	10.3	5.8	4.2	0.0	2.9
4		10	10	2	4.5	2.1	6.7	0.0	4.4
5		7	4	1	2.2	0.8	0.2	-	0.1
6		1	-	-	2.7	0.0	-	-	-
		19	33	18	33.0	18.0	20.9	11.1	18.8
							4 df p<.001	3df p<.02	4df p<.001

2. Nature of Accident

(a) Injuries

The injuries were fairly uniform. Most subjects suffered fractures to the legs and some fractured pelvises; most also suffered lacerations to face and arms. The uniformity of the injuries reduces one possible source of variance in outcome. Inspection of medical records revealed no differences between treatment conditions in the type or severity of injury.

(b) Type of Vehicle

Subjects were in cars for 60% and rode motor bikes for 40% of the sample. No differences were found between conditions in type of vehicle.

(c) Length of Stay in Hospital

This could be considered a measure of severity of injury or be treated as an outcome measure, hypothesising that crisis intervention will reduce anxiety and promote healing.

Table 7 shows a trend for the FI condition to have fewer stays over four weeks than the DC condition. The difference is not significant. There is no basis in the data for deciding whether this trend indicates lower stress for FI subjects or indicates an outcome of crisis intervention. As the trend is not significant it is unlikely to have a biassing effect on other outcome measures. Almost half of the sample were in hospital for more than four weeks, with a maximum stay of 11 weeks.

TABLE 4

MARITAL STATUS BY TREATMENT CONDITION

Category	Condition				
	DC	IR	FI	Total	%
Single	19	5	9	33	47.1
Married	11	5	21	37	52.9
Total	30	10	30	70	100.0

Chi-Square = 6.69, 2 df, $p<.05$

TABLE 5

COUNTRY OF ORIGIN BY TREATMENT CONDITION

Category	Condition				
	DC	IR	FI	Total	%
Australian	27	8	27	62	88.6
Overseas (English speaking)	0	1	1	2	2.8
European	3	1	2	6	8.6
Total	30	10	30	70	100.0

Chi-Square = 0.84, 2 df, n.s.

TABLE 6

RELIGION BY TREATMENT CONDITION

Category	Condition				
	DC	IR	FI	Total	%
No Religion	0	0	3	3	4.3
Catholic	7	0	7	14	20.0
Protestant	20	10	18	48	68.6
Other	3	0	2	5	7.1
Total	30	10	30	70	100.0

Chi-Square was not computed as marginal frequencies were small. By inspection there were no meaningful differences.

TABLE 7

LENGTH OF STAY (HOSPITAL) BY TREATMENT CONDITION

Length of Stay (weeks)	Condition				
	DC	IR	FI	Total	%
11+	3	-	2	5	7.2
10	4	1	3	8	11.4
9	2	-	1	3	4.3
8	1	-	-	1	1.4
7	-	1	-	1	1.4
6	3	-	1	4	5.7
5	5	2	3	10	14.3
4	3	3	4	10	14.3
3	6	1	7	14	20.0
2	2	1	7	10	14.3
1	1	1	2	4	5.7
Total	30	10	30	70	100.0

Chi-Square = 4.43, 2 df, n.s.

(d) Involvement of Others

Very few subjects reported any other person being involved as a passenger. There were thus no differences between conditions in this potential stress factor.

3. Pre-accident Stresses

Response to the stress of injury and its sequelae might be a function of differences in prior stresses. Other research showed accidents are associated with periods of high stress. (Henderson, personal communication, 1973; Selzer and Vinokur, 1974).

To ensure there were no biassing differences in pre-accident stresses reports of stresses in the twelve months prior to the accident were obtained and classified by social role area. Table 8 shows that social, disciplinary and family stresses were the most common. No differences were found between treatment conditions for any stress area. Table 9 shows no differences in the total number of areas where stress had occurred.

The number of stressful events were obtained using the list reported by Hennessy, Bruen and Cullen (1973). Table 10 shows no differences between conditions in the number of events reported.

Comparisons with rates of events reported by Hennessy et al (1973) suggested a higher rate for some events. As age and sex might affect this and age-sex norms are not presented by Hennessy et al, no firm conclusion could be drawn.

TABLE 8

AREAS OF STRESS BEFORE ACCIDENT BY TREATMENT CONDITION

Stress Area	Category	Condition			
		DC	IR	FI	Total
PERSONAL	Present	0	2	1	3
	Absent	30	8	29	67
	Total	30	10	30	70
SOCIAL *	Present	8	5	12	25
	Absent	22	5	18	45
	Total	30	10	30	70
WORK	Present	0	0	3	3
	Absent	30	10	27	67
	Total	30	10	30	70
FAMILY	Present	7	2	4	13
	Absent	23	8	26	57
	Total	30	10	30	70
DISCIPLINARY	Present	9	3	8	20
	Absent	21	7	22	50
	Total	30	10	30	70

* Chi-Square = 2.16, 2df, n.s.

All other area, Chi-Square <df, n.s.

TABLE 9

TOTAL NUMBER OF STRESS AREAS BEFORE ACCIDENT BY TREATMENT CONDITION

Number of Areas	Condition			
	DC	IR	FI	Total
4	-	1	-	1
3	1	1	1	3
2	7	2	12	21
1	9	2	8	19
0	13	4	9	26
Total	30	10	30	70
Hi:	17	6	21	44
Lo:	13	4	9	26
Total	30	10	30	70

Chi-Square = 1.18, 2 df, n.s.

TABLE 10

NUMBER OF STRESS EVENTS BEFORE ACCIDENT

BY TREATMENT CONDITION

Number of Stress Events	Condition			
	DC	IR	FI	Total
9+	-	-	-	-
8	1	-	-	1
7	3	2	1	6
6	3	-	3	6
5	2	-	5	7
4	5	2	7	14
3	9	4	7	20
2	4	-	4	8
1	3	2	3	8
0	-	-	-	-
Total	30	10	30	70
Hi:	14	4	16	34
Lo:	16	6	14	36
Total	30	10	30	70

Chi-Square = 0.61, 2 df, n.s.

C. Immediate Response to the Accident Event and Sequelae

The issues examined here were:

(i) was the accident a crisis?

(ii) was it equally distressing across treatment conditions?

1. Perception of the Accident

Table 11 presents perceived degree of risk to life. There were no differences between conditions. Overall 84.2% perceived the threat to life as moderate or great. Attribution of responsibility for the accident did not differ between conditions (cf Table 12). Three-quarters of the sample blamed the other party or circumstances.

2. Affective Response to the Accident

Table 13 presents the distribution of ratings of affect during and immediately after the accident. No differences were found between conditions for any affect. The affects were intense. Table 14 shows the distribution of the number of affects rated as 4+, i.e. as being at least as strong as ever felt before by the subject. Again no differences between treatment conditions were found. Over 90% of subjects who were conscious after the accident reported two or more affects at this level.

Table 15 shows no differences between treatment conditions in the distribution of amnesia for the accident period. Thus differential recall did not bias ratings of affective response.

3. Affective Response to Hospital Admission

Table 16 presents the distribution of ratings of affective response to admission. Subjects in the DC condition rated

fearful or helpless as "stronger than ever before" significantly more often than subjects in the IR condition with FI condition intermediate. Trends in the same direction were apparent on other items.

Table 17 shows that ratings of 4+ were significantly more frequent for the DC condition than for FI with IR intermediate.

Overall, the differences between FI and DC were small and more than half of the subjects rated confused, helpless, angry, fearful and anxious as 4 or 5. Thus the differences were due to low frequencies of high ratings from the IR group and are mainly in the frequency of ratings of 5 v. 4.

The potential biassing effect of the difference is examined in considering the relationship between affective response and outcome (further in this section).

4. Affective Response to Hospital Experience

Differences between conditions may emerge here because DC subjects were rating their total period of admission. FI and IR subjects rated only the first few days up to the point of interview.

Significant differences emerged with DC subjects more often reporting feeling helpless, fearful and frustrated (cf Table 18). No evidence was found of secondary gains through relief from responsibility.

Table 19 shows that the frequency of affect ratings of 4 or more was significantly higher for DC, with no difference between FI and IR.

Again, high ratings (4 or 5) were common in all conditions. Although the difference may be due to different time periods being rated, the possible biassing effect on outcome is considered later.

5. Overall Affective Response

Table 25 presents the number of affect ratings of 4 or 5 summed for each subject over all three phases of the period. All but one subject reported at least two affects at this high level, with two thirds doing so on eight or more affects.

6. Other Cognitive and Affective Responses

Table 21 presents subjects' ratings of the degree of disruption in their lives created by the event. All indicated it created at least some limitations, with over three-quarters rating it as creating considerable or severe limitations. There were no significant differences between conditions although DC tended to more often see the disruption as at least considerable.

Table 22 shows that no subject perceived the event as a challenge; about half saw it as a loss and half as a threat. There were no differences between conditions in this aspect of perception of the event.

Table 23 presents frequency of intrusive thoughts about the event. All but two subjects reported this as occurring more than once. Over 87% reported frequent or compulsive recall. No differences between conditions were found. Rated degree of disturbance when recalling the accident was high, with three-quarters rating this 4 or 5. No differences were found between conditions (cf Table 24).

7. Reaction to Hospital Staff

Table 20 shows no differences in desire for more information about physical status with three-quarters reporting they had sufficient information.

Table 26 shows subjects had high levels of confidence in their doctors and nurses with no differences between condition. Perception of nurses was even more favourable than perception of doctors.

8. Summary

In summary, the event was highly distressing, was perceived as a disruptive loss or threat and produced cognitive and affective disturbance. It thus may be treated as a crisis for all subjects according to the various criteria established in earlier chapters.

The differences in intensity of affect raise a question about the comparability of IR and DC subjects although no difference was found when overall affect was examined (Table 25). This may reduce the certainty of interpretation of any outcome differences. To ensure such differences are not spurious, the effect of intensity of affect on outcome is considered later.

TABLE 11

PERCEIVED RISK TO LIFE BY TREATMENT CONDITION

Risk Level	Condition				
	DC	IR	FI	Total	%
Great	12	5	13	30	42.9
Moderate	13	4	12	29	41.3
Slight	5	1	5	11	15.8
Total	30	10	30	70	100.0

Chi-Square = 0.31, 2 df, n.s.

TABLE 12

ATTRIBUTION OF RESPONSIBILITY BY TREATMENT CONDITION

Locus	Condition				
	DC	IR	FI	Total	%
Me	5	3	9	17	24.3
Other	16	4	11	31	44.3
Circumstances	9	3	10	22	31.4
Total	30	10	30	70	100.0

Chi-Square = 1.65, 2 df, n.s.

TABLE 13

AFFECTIVE RESPONSE TO ACCIDENT BY TREATMENT CONDITION

Condition		Affect																							
		Numb, not real etc.				Confused, Out of Control etc				Helpless Worried etc				Fear of Injury				Fear of Death				Fear, harm others				Fear of punishment			
		DC	IR	FI	T	DC	IR	FI	T	DC	IR	FI	T	DC	IR	FI	T	DC	IR	FI	T	DC	IR	FI	T	DC	IR	FI	T
Rating Scale	5	16	2	13	31	13	3	12	28	20	4	18	42	13	2	14	29	1	–	2	3	6	2	7	15	–	–	–	–
	4	6	2	5	13	9	1	5	15	4	1	3	8	7	1	5	13	4	1	1	6	1	1	1	3	–	–	1	1
	3	2	1	4	7	2	1	3	6	2	2	5	9	4	2	5	11	2	1	1	4	–	–	–	–	2	–	1	3
	2	2	–	1	3	1	1	–	2	–	1	–	1	1	2	2	5	10	1	9	20	3	–	2	5	–	–	–	–
	1	–	4	4	8	1	3	7	11	–	1	1	2	1	2	1	4	9	6	14	29	16	6	17	39	24	9	25	58
Not Rated*		4	1	3	8	4	1	3	8	4	1	3	8	4	1	3	8	4	1	3	8	4	1	3	8	4	1	3	8
Total		30	10	30	70	30	10	30	70	30	10	30	70	30	10	30	70	30	10	30	70	30	10	30	70	30	10	30	70
Hi		16	2	13	31	13	3	12	28	20	4	18	42	13	2	14	29	17	3	13	33	10	3	10	23	2	–	2	4
Lo		10	7	14	31	13	6	15	34	6	5	9	20	13	7	13	33	9	6	14	29	16	6	17	39	24	9	25	58
Total		26	9	27	62	26	9	27	62	26	9	27	62	26	9	27	62	26	9	27	62	26	9	27	62	26	9	27	62
Chi-Square		4.2				2.73				3.3				2.57				3.3				1.58				0.72			
df		2				2				2				2				2				2				2			
p		n.s.				n.s.				n.s.				n.s.				n.s.				n.s.				n.s.			

* Not rated as unconscious until admission to hospital

TABLE 14

NUMBER OF AFFECT RATINGS OF 4+ FOR RESPONSE TO ACCIDENT BY TREATMENT CONDITION

Number of 4+ Ratings	Condition				
	DC	IR	FI	Total	%
7	-	-	-	-	-
6	1	-	1	2	2.9
5	6	-	3	9	12.9
4	11	2	8	21	30.0
3	5	2	6	13	18.6
2	2	2	7	11	15.7
1	1	1	2	5	4.1
0	-	1	-	1	1.4
Not rated*	4	1	3	8	11.4
Total	30	10	30	70	100.0
Hi:	18	2	12	32	
Lo:	8	7	15	30	
Total	26	9	27	62	

Chi-Square = 5.29, 2 df, .10>p>.05, n.s.

* Not rated as unconscious until admission to hospital.

TABLE 15

REPORTED AMNESIA FOR ACCIDENT
BY TREATMENT CONDITION

Category	Condition				
	DC	IR	FI	Total	%
No recall	4	1	4	9	12.9
Few details only	3	3	2	8	11.4
Partial	6	-	4	10	14.3
Full recall	17	6	20	43	61.4
Total	30	10	30	70	100.0
Hi:	13	4	10	27	
Lo:	17	6	20	43	
Total	30	10	30	70	

Chi-Square = 0.64, 2 df, n.s.

TABLE 16

AFFECTIVE RESPONSE TO HOSPITAL ADMISSION BY TREATMENT CONDITION

Condition		Affect																							
		Confused				Helpless				Angry				Fearful				Guilty				Anxious			
		DC	IR	FI	T	DC	IR	FI	T	DC	IR	FI	T	DC	IR	FI	T	DC	IR	FI	T	DC	IR	FI	T
Rating Scale	5	7	3	9	19	20	2	14	36	9	2	10	21	18	1	10	29	6	1	5	12	19	3	14	36
	4	14	3	7	24	5	4	8	17	5	2	4	11	4	3	9	16	2	–	2	4	6	1	4	11
	3	7	1	8	16	5	3	5	13	5	1	1	6	4	2	6	12	3	–	1	4	4	3	5	12
	2	1	–	2	3	–	–	1	1	4	–	3	7	4	1	1	6	2	–	2	4	–	–	–	–
	1	1	3	3	7	–	1	1	2	7	6	11	24	–	3	3	6	17	9	19	45	1	3	6	10
Not Rated*		–	–	1	1	–	–	1	1	–	–	1	1	–	–	1	1	–	–	1	1	–	–	1	1
Total		30	10	30	70	30	10	30	70	30	10	30	70	30	10	30	70	30	10	30	70	30	10	30	70
Hi		21	6	16	43	20	2	14	36	14	4	14	32	18	1	10	29	13	1	10	24	19	3	14	36
Lo		9	4	13	26	10	8	15	33	16	6	15	37	12	9	19	40	17	9	19	45	11	7	15	33
Total		30	10	29	69	30	10	29	69	30	10	29	69	30	10	29	69	30	10	29	69	30	10	29	69
Chi-Square		1.09				6.7				0.20				8.9				3.7				3.5			
df		2				2				2				2				2				2			
p		n.s.				<.05				n.s.				<.05				n.s.				n.s.			

* Not rated as unconscious until admission to hospital.

TABLE 17

NUMBER OF AFFECT RATINGS OF 4+ IN RESPONSE TO HOSPITAL ADMISSION BY TREATMENT CONDITION

Number of 4+ Ratings	Condition				
	DC	IR	FI	Total	%
7	-	-	-	-	-
6	1	1	2	4	5.7
5	12	1	7	20	28.7
4	9	1	9	19	27.1
3	2	-	2	4	5.7
2	1	4	2	7	10.0
1	3	2	3	8	11.4
0	2	1	4	7	10.0
Not Rated*	-	-	1	1	1.4
Total	30	10	30	70	100.0
Hi:	22	3	18	43	
Lo:	8	7	11	26	
Total	30	10	29	69	

Chi-Square = 10.30, 2 df, $p<.01$

* Not rated as unconscious at the time of hospital admission.

TABLE 18

AFFECTIVE RESPONSE TO HOSPITAL EXPERIENCE BY TREATMENT CONDITION

Condition		Affect																			
		Fear				Helpless				Frustrated				Dependent				Free from Responsibility			
		DC	IR	FI	T	DC	IR	FI	T	DC	IR	FI	T	DC	IR	FI	T	DC	IR	FI	T
Rating Scale	5	4	-	3	7	18	2	13	33	25	4	17	46	22	4	15	41	-	-	-	-
	4	6	1	5	12	10	2	7	19	5	2	5	12	4	1	7	12	-	-	-	-
	3	8	1	4	13	2	4	6	12	-	2	7	9	4	2	6	12	-	-	-	-
	2	8	1	6	15	-	-	4	4	-	1	1	2		-	1	1	-	-	-	-
	1	4	7	12	23	-	2	-	2	-	1	-	1	-	3	1	4	30	10	30	70
Total		30	10	30	70	30	10	30	70	30	10	30	70	30	10	30	70	30	10	30	70
Hi:		18	2	12	32	18	2	13	33	25	4	17	46	22	4	15	41	No variation			
Lo:		12	8	18	38	12	8	17	37	5	6	13	24	8	6	15	29				
Total		30	10	30	70	30	10	30	70	30	10	30	70	30	10	30	70				
Chi-Square			8.26				10.4				8.3				5.2						
df			2				2				2				2						
p			<.02				<.01				<.02				n.s.						

TABLE 19

NUMBER OF AFFECT RATINGS OF 4+ IN RESPONSE TO HOSPITAL EXPERIENCE BY TREATMENT CONDITION

Number of 4+ Rating	Condition				
	DC	IR	FI	Total	%
4	10	1	7	18	25.8
3	16	3	10	29	41.4
2	2	1	5	8	11.4
1	2	1	4	7	10.0
0	-	4	4	8	11.4
Total	30	10	30	70	100.0
Hi:	26	4	17	47	
Lo:	4	6	13	23	
Total	30	10	30	70	

Chi-Square = 10.3, 2 df, $p<.01$

TABLE 20

DESIRE FOR MORE INFORMATION ABOUT PHYSICAL STATUS BY TREATMENT CONDITION

Desire More Information	Condition				
	DC	IR	FI	Total	%
Yes	7	3	8	18	25.7
No	23	7	22	52	74.3
Total	30	10	30	70	100.0

Chi-Square = 0.19, 2 df, n.s.

TABLE 21

PERCEIVED LIFE DISRUPTION DUE TO ACCIDENT BY TREATMENT CONDITION

Category	Condition				
	DC	IR	FI	Total	%
Severe Disruption	3	-	6	9	12.8
Considerable Limitations	24	7	14	45	64.3
Some Limitations	3	3	10	16	22.9
No Change	-	-	-	-	0.0
Increases Rewards	-	-	-	-	0.0
Total	30	10	30	70	100.0
Hi:	27	7	20	54	
Lo:	3	3	10	16	
Total	30	10	30	70	

Chi-Square = 5.04, 2 df, .10>p>.05, n.s.

TABLE 22

PERCEPTION OF ACCIDENT EVENT BY TREATMENT CONDITION

Category	Condition				
	DC	IR	FI	Total	%
Loss	15	4	11	30	42.9
Threat	15	6	19	40	57.1
Challenge	-	-	-	-	0.0
Total	30	10	30	70	100.0

Chi-Square = 1.12, 2 df, n.s.

TABLE 23

RATED FREQUENCY OF REPETITIOUS RECALL OF ACCIDENT EVENT BY TREATMENT CONDITION

Category	Condition				
	DC	IR	FI	Total	%
Many times - Compulsive	8	4	15	27	38.6
Often	20	3	11	34	48.6
2-3 times	2	1	4	7	10.0
Once	-	1	-	1	1.4
Nil	-	1	-	1	1.4
Total	30	10	30	70	
Hi:	8	4	15	27	
Lo:	22	6	15	43	
Total	30	10	30	70	

Chi-Square = 3.33, 2 df, n.s.

TABLE 24

RATED DISTURBANCE WHEN RECALLING ACCIDENT EVENT

BY TREATMENT CONDITION

Rating	Condition				
	DC	IR	FI	Total	%
5	19	4	18	41	58.5
4	8	-	6	14	20.0
3	3	3	5	11	15.7
2	-	2	-	2	2.9
1	-	1	1	2	2.9
Total	30	10	30	70	100.0
Hi:	19	4	18	41	
Lo:	11	6	12	29	
Total	30	10	30	70	

Chi-Square = 1.72, 2 df, n.s.

TABLE 25

NUMBER OF AFFECT RATINGS OF 4+ TO ALL PHASES OF EXPERIENCE BY TREATMENT CONDITION

Number of 4+ Ratings*	Condition			
	DC	IR	FI	Total
15	2	-	-	-
14	-	1	1	2
13	5	-	3	8
12	7	-	6	13
11	4	1	3	8
10	-	-	3	3
9	2	1	2	5
8	5	-	-	5
7	1	1	1	3
6	-	1	2	3
5	2	2	2	6
4	-	-	2	2
3	1	-	3	4
2	1	2	2	5
1	-	-	-	-
0	-	1	-	1
Total	30	10	30	70
Hi:	18	2	16	36
Lo:	12	8	14	34
Total	30	10	30	70

Chi-Square = 3.7, 2 df, n.s.

* Where no ratings obtained for one phase, total assumed zero for that phase.

TABLE 26

RATED CONFIDENCE IN (a) DOCTORS AND (b) NURSES

BY TREATMENT CONDITION

A. DOCTORS

Category	Condition				
	DC	IR	FI	Total	%
Very little	-	-	-	-	-
Slight	1	-	2	3	4.3
Fair amount	10	3	8	21	30.0
Almost Complete	5	1	6	12	17.1
Absolute	14	6	14	34	48.6
Total	30	10	30	70	100.0
Hi:	16	4	16	36	
Lo:	14	6	14	34	
Total	30	10	30	70	

Chi-Square = 0.61, 2 df, n.s.

B. NURSES

Category	Condition				
	DC	IR	FI	Total	%
Very little	-	-	-	-	-
Slight	-	-	-	-	-
Fair amount	3	-	1	4	5.7
Almost Complete	4	2	1	7	10.0
Absolute	23	8	28	59	84.3
Total	30	10	30	70	100.0
Hi:	7	2	2	11	
Lo:	23	8	28	59	
Total	30	10	30	70	

Chi-Square = 3.30, 2 df, n.s.

D. Outcome Measures

Results on measures of outcome are presented in Tables 27 to 41. Where possible, co-efficient alpha was calculated and is presented with the relevant table. All outcome measures where this was computed were found to have adequate reliabilities.

Significant differences between treatment conditions were found on the following outcome measures:

1. Reported improvement since the event (Table 27).

2. Sensitization to accident-related cues (Table 28).

3. Rated intensity of specific traumatic neurosis symptoms (Table 29) and overall symptom intensity (Table 30).

4. Number of subjects reporting post-event financial stress (Table 31) and number of post-accident stress areas (Table 32).

5. Langsley Symptoms Scale score (Table 33).

6. Langner Scale score category (Table 34).

7. Bradburn affect scale scores for pleasant affect, unpleasant affect and affect balance (Table 35).

8. Langsley Job Performance scores (for those working) (cf Table 37) and Work Adjustment (all subjects - cf Table 38).

9. Health deterioration on Maddison's Health Questionnaire (Table 39).

Differences were not significant for stress areas other than finance (Table 31) and in numbers returned to work (Table 36). Number working was the only outcome measure to favour DC condition. On all other measures, DC subjects had the poorest outcome and FI subjects the best outcome. The IR condition was typically intermediate between DC and FI.

Examination of the distributions demonstrates that the DC group had not returned to normal functioning at follow-up.

The availability of norms for the Langner Scale allowed comparison of each condition to expected frequencies for a male group of similar age. These were derived from Canberra Mental Health Survey results.

Table 40 presents expected frequencies and Table 41 the comparison of observed and expected for each condition. The distribution for FI subjects was close to that expected while the DC subjects were markedly elevated. The IR subjects were significantly above the level expected by a one-tailed test.

Thus the accident and its sequelae were highly disturbing and full crisis intervention removed this disturbing effect completely. Without intervention subjects displayed multiple disturbance three to four months after the event.

TABLE 27

PERCEIVED IMPROVEMENT SINCE ACCIDENT

BY TREATMENT CONDITION

Reported Improvement	Condition			
	DC	IR	FI	Total
No	17	3	1	21
Some	13	4	14	31
Yes	-	3	15	18
Total	30	10	30	70

Chi-Square = 28.9, 4 df, $p<.001$

TABLE 28

SENSITIZATION TO CUES PROMPTING RECALL OF

ACCIDENT EVENT BY TREATMENT CONDITION

Category	Condition			
	DC	IR	FI	Total
Great	5	1	-	6
Moderate	13	2	6	21
Slight	12	7	24	43
Total	30	10	30	70
Hi:	18	3	6	27
Lo:	12	7	24	43
Total	30	10	30	70

Chi-Square = 7.40, 2 df, $p<.05$

TABLE 29

RATED INTENSITY OF TRAUMATIC NEUROSIS SYMPTOMS BY TREATMENT CONDITION

Condition		Symptom											
		Uncontrollable Affect				Sleep Disturbance				Cognitive Loss			
		DC	IR	FI	T	DC	IR	FI	T	DC	IR	FI	T
Rating Scale	5	17	2	4	23	15	2	4	21	4	2	3	9
	4	7	3	2	12	7	3	2	12	1	3	-	4
	3	5	1	5	11	4	1	4	9	7	-	1	8
	2	1	2	10	13	4	2	7	13	15	1	4	20
	1	-	2	9	11	-	2	13	15	3	4	22	29
Total		30	10	30	70	30	10	30	70	30	10	30	70
Hi:		24	5	6	34	22	5	6	33	27	6	8	41
Lo:		6	5	24	36	8	5	24	37	3	4	22	29
Total		30	10	30	70	30	10	30	70	30	10	30	70
Chi-Square			21.9				17.1				17.8		
df			2				2				2		
p			<.001				<.001				<.001		

TABLE 30

TOTAL OF TRAUMATIC SYMPTOM RATINGS

BY TREATMENT CONDITION

Total Score	Condition			
	DC	IR	FI	Total
15	3	2	3	8
14	2	-	-	2
13	2	-	-	2
12	8	2	-	10
11	3	1	-	4
10	5	-	-	5
9	2	1	3	6
8	1	-	3	4
7	3	-	3	6
6	1	-	2	3
5	-	2	2	4
4	-	-	6	6
3	-	2	8	10
Total	30	10	30	70
Hi:	25	6	6	37
Lo:	5	4	24	33
Total	30	10	30	70

Chi-Square = 24.5, 2 df, $p<.001$

Coefficient alpha = 0.88

TABLE 31

STRESSES AREAS REPORTED SINCE THE ACCIDENT EVENT BY TREATMENT CONDITION

Stress Area	Category	Condition				
		DC	IR	FI	Total	Chi-Square 2 df
PERSONAL	Present	17	7	17	41	0.61 n.s.
	Absent	13	3	13	29	
TOTAL		30	10	30	70	
SOCIAL	Present	12	5	9	26	1.46 n.s.
	Absent	18	5	21	44	
TOTAL		30	10	30	70	
WORK	Present	15	7	15	37	1.37 n.s.
	Absent	15	3	15	33	
TOTAL		30	10	30	70	
DISCIPLINARY	Present	4	2	6	12	0.57 n.s.
	Absent	26	8	24	58	
TOTAL		30	10	30	70	
FINANCE	Present	25	4	15	44	9.6
	Absent	5	6	15	26	$p<.05$
TOTAL		30	10	30	70	
FAMILY	Present	23	6	22	51	1.05 n.s.
	Absent	7	4	8	19	
TOTAL	30	10	30	70		

TABLE 32

NUMBER OF STRESS AREAS REPORTED AS PRESENT SINCE THE ACCIDENT EVENT BY TREATMENT CONDITION

Number of Areas Reported	Condition			
	DC	IR	FI	Total
6	1	2	-	2
5	5	-	2	7
4	10	3	6	19
3	7	-	6	13
2	7	3	9	19
1	-	1	5	6
0	-	1	2	3
Total	30	10	30	70
Hi:	23	5	14	42
Lo:	7	5	16	28
Total	30	10	30	70

Chi-Square = 6.11, 2 df, $p<.05$

TABLE 33

LANGSLEY SYMPTOM SCORES BY TREATMENT CONDITION

Score	Condition			
	DC	IR	FI	Total
Hi: 7+	25	6	7	38
Lo: 6-	5	4	23	32
Total	30	10	30	70

Chi-Square = 21.9, 2df, $p<.001$

Coefficient alpha[a] = 0.71

TABLE 34

LANGNER SCALE CATEGORY BY TREATMENT CONDITION

Category	Condition			
	DC	IR	FI	Total
Disturbed	15	5	4	24
Borderline	15	1	3	19
Normal	-	4	23	27
Total	30	10	30	70

Chi-Square = 37.8, 4 df, $p<.001$

Coefficient alpha[a] = 0.81

TABLE 35

BRADBURN SCALE SCORES BY TREATMENT CONDITIONS

A. PLEASANT FEELINGS

Score	Condition			
	DC	IR	FI	Total
Hi: 4+	3	3	26	32
Lo: 3-	27	7	4	38
Total	30	10	30	70

Chi-Square = 44.8, 2 df, $p<.001$ Coefficient alpha = 0.87

B. UNPLEASANT FEELINGS

Score	Condition			
	DC	IR	FI	Total
Hi: 8+	24	5	7	36
Lo: 7-	6	5	23	34
Total	30	10	30	70

Chi-Square = 19.3, 2 df, $p<.001$ Coefficient alpha = 0.88

C. AFFECT BALANCE

Balance	Condition			
	DC	IR	FI	Total
Positive	-	5	22	27
Negative	30	5	8	43
Total	30	10	30	70

Chi-Square = 35.0, 2 df, $p<.001$

Coefficient alpha = 0.90

TABLE 36

PROPORTIONS WORKING AT FOLLOW-UP BY TREATMENT CONDITION

Category	Condition			
	DC	IR	FI	Total
Working	26	8	20	54
Not Working	4	2	10	16
Total	30	10	30	70

Chi-Square = 3.42, 2 df, n.s.

TABLE 37

LANGLSEY JOB PERFORMANCE SCALE FOR THOSE WORKING AT FOLLOW UP

Score	Condition			
	DC	IR	FI	Total
2+	16	3	2	21
1	8	1	3	12
0	2	4	15	21
Total	26	8	20	54

For 2+ vs 1-, Chi-Square = 12.8, 2 df, $p<.01$

For 1+ vs 0, Chi-Square = 21.9, 2 df, $p<.001$

Coefficient alpha = 0.67

TABLE 38

OVERALL WORK ADJUSTMENT ON LANGSLEY JOB PERFORMANCE SCALE BY TREATMENT CONDITION

Category*	Condition			
	DC	IR	FI	Total
Poor	20	5	12	37
Borderline	8	1	3	12
Good	2	4	15	21
Total	30	10	30	70

Chi-Square = 16.8, 4 df, $p<.01$

For Poor vs Borderline + Good: Chi-Square = 6.1, 2 df, $p<.05$

* POOR = All who were working at follow-up and
All who were working and checked 3 or above on at least two items of the Langsley Job Performance Scale.

* BORDERLINE = All who were working and checked 3 or above on one item of the Langsley Job Performance Scale.

* GOOD = All who were working and checked below 3 on all items of the Langsley Job Performance Scale.

TABLE 39

HEALTH DETERIORATION ON MADDISON'S HEALTH QUESTIONNAIRE BY TREATMENT CONDITION

Deterioration	Condition			
	DC	IR	FI	Total
Severe (15+)	17	3	2	22
Noticeable (5-14)	13	4	9	26
Slight (0-4)	-	3	19	22
Total	30	10	30	70

Chi-Square = 31.8, 4 df, $p<.001$

Coefficient alpha = 0.80

TABLE 40

EXPECTED FREQUENCIES IN LANGNER SCALE CATEGORIES FOR (a) A RANDOM MALE ADULT SAMPLE, (b) CORRECTED FOR SAMPLE SES, (c) CORRECTED FOR SAMPLE AGE, AND (d) JOINTLY CORRECTED FOR SAMPLE AGE x SES.

Langner Category	(a) Random	(b) Corrected for SES	(c) Corrected for Age	(d) Corrected for SES & Age
Disturbed (7+)	3.7	5.4	3.3	6.2
Borderline (4-6)	11.0	14.2	13.1	16.3
Normal (0-3)	55.3	50.4	53.6	47.5
Total	70.0	70.0	70.0	70.0

TABLE 41

POPULATION AND SAMPLE FREQUENCIES FOR LANGNER SCALE CATEGORIES BY TREATMENT CONDITIONS

Category	Condition							
	DC		IR		FI		Total	
	fe	fo	fe	fo	fe	fo	fe	fo
Disturbed	2.7	15	3.3*	6	2.7	4	6.2	24
Borderline	6.9	15			6.9	3	16.3	19
Normal	20.4	-	6.7	4	20.4	23	47.5	27
Total	30.0	30	10.0	10	30.0	30	70.0	70
Chi-Square	80.5		3.5		3.1		59.5	
df	2		1		2		2	
p	<.001		<.05 (one-tailed)		n.s.		<.001	

* Disturbed and Borderline Categories for IR group combined due to small frequencies.

The differences were large on almost all measures and appeared in stress symptoms, reduction of pleasant experiences, work adjustment and overall health.

Before concluding that crisis intervention was solely responsible for the differences, the role of mediating variables such as social support, affective disturbance, and post-accident stresses is considered later.

E. Social and Practical Support

1. Need and Availability

Table 42 shows that subjects in the DC condition significantly more often reported help as needed. All subjects who reported help was needed but not available were in the DC condition.

2. Helpfulness of Community Care Givers

Tables 43 and 44 report the frequency of community care givers who were seen as helpful or as unhelpful. There were no significant differences between conditions. Very few subjects reported contacts as unhelpful.

3. Sources of Help

Sources of help were arranged as a hierarchy from immediate family to professionals. Two thirds of subjects relied on family or friends. All but two subjects sought some help from others. There were no differences between conditions in resort to "secondary" sources of help (cf Table 45).

4. Quality of Available Support

Where a category of significant other was available to a subject, that relationship was classified as supportive if the total rating on the three scales was 5 or less. This indicates supportive functioning on all three variables. Available significant others whose ratings totalled 6 or more were classified as unsupportive.

Frequencies of subjects reporting each significant other available and supportive (A and S), available and unsupportive (A and U) and unavailable ($\overline{A}$) are presented in Tables 46 (for immediate family) and 47 (for non-family).

The results show significant differences in the availability of parents and spouse. This is due to DC subjects being less often married and thus more often still living with parents than IR of RI subjects. The possible biassing effect on outcome is considered later. The numbers "available" for strangers were too small to allow statistical comparisons between conditions as were the numbers "unavailable" for friends, doctors/agencies and boss.

Differences between conditions in the supportiveness of available significant others were tested by Fisher's Exact Test (Siegal, 1956) where numbers were small and otherwise by chi-square.

Trends are apparent for FI subjects to more often report supportive and less often report unsupportive significant others than DC subjects. Differences were significant for "other

relatives" (Fisher's Test) and for "friends" and "boss" (chi-square).

These results suggest that crisis intervention altered the perceived supportiveness of relationships with available significant others.

To test this effect, each subject was assigned three scores: (a) the number of available significant others rated as supportive; (b) the number rated unsupportive; and (c) the Support Balance Score, equal to (a) minus (b).

Table 48 shows that the DC subjects less often reported significant others as supportive than FI subjects ($p<.001$). Table 49 shows DC subjects more often reported significant others as unsupportive than FI subjects ($p<.02$). Support Balance Scores (cf Table 50) were significantly higher for FI subjects than for DC subjects. IR subjects were intermediate on all three measures.

Thus, social support was greater for subjects who recieved crisis intervention. The low reliability of the support measures suggests that quality of support is not a function of the subject's behaviour. Even so, the differences which occurred may have affected outcome. (See later).

TABLE 42

REPORTED NEED FOR AND AVAILABILITY OF HELP

BY TREATMENT CONDITION

Category	Condition			
	DC	IR	FI	Total
Needed, absent	9	-	-	9
Needed, present	8	4	7	19
Not Needed	13	6	23	42
Total	30	10	30	70
Needed	17	4	7	28
Not Needed	13	6	23	42
Total	30	10	30	70

Chi-Square = 6.94, 2 df, $p<.05$

TABLE 43

NUMBER OF CONTACTS WITH COMMUNITY "CARE GIVERS" REPORTED AS HELPFUL BY TREATMENT CONDITION

Number Reported	Condition			
	DC	IR	FI	Total
3	1	-	1	2
2	2	1	3	6
1	14	1	12	27
0	13	8	14	35
Total	30	10	30	70
Hi:	17	2	16	35
Lo:	13	8	14	35
Total	30	10	30	70

Chi-Square = 4.26, 2 d.f., n.s.

TABLE 44

NUMBER OF CONTACTS WITH COMMUNITY CAREGIVERS REPORTED AS UNHELPFUL BY TREATMENT CONDITION

Number Reported	Condition			
	DC	IR	FI	Total
3	1	-	-	1
2	1	-	-	1
1	3	2	4	9
0	25	8	26	59
Total	30	10	30	70
Hi:	5	2	4	11
Lo:	25	8	26	59
Total	30	10	30	70

Chi-Square = 0.28, 2 d.f., n.s.

TABLE 45

HIERARCHY OF ASSISTANCE SEEKING AFTER THE ACCIDENT BY TREATMENT CONDITION

Category	Condition				
	DC	IR	FI	Total	%
1. Self	2	-	-	2	2.9
2. Family, Friends	16	8	22	46	65.7
3. Membership Groups	2	-	3	5	7.1
4. Strangers	2	-	1	3	4.3
5. Community Institutions	8	2	4	14	20.0
Total	30	10	30	70	100.0
Primary Source (1&2)	18	8	22	48	68.6
Secondary Source (3,4,5)	12	2	8	22	31.4
Total	30	10	30	70	100.0

Chi-Square = 1.94, 2 d.f., n.s.

TABLE 46

AVAILABILITY AND RATED SUPPORTIVENESS BY TREATMENT CONDITION FOR SIGNIFICANT OTHERS: FAMILY

Significant Other	Availability	Supportiveness	Condition			
			DC	IR	FI	Total
MOTHER	A	S	1	4	15	20
	A	U	6	2	5	13
	$\overline{A}$	-	23	4	10	37
	Total		30	10	30	70
A v. $\overline{A}$, Chi-Square = 12.0, 2df, $p<.01$; S v. U, $p>.05$, Fisher's Exact Test, n.s.						
FATHER	A	S	1	1	8	10
	A	U	5	1	10	16
	$\overline{A}$	-	24	8	12	44
	Total		30	10	30	70
A v. $\overline{A}$, Chi-Square = 11.9, 2df, $p<.01$; S v. U, $p>.05$, Fisher's Exact Test, n.s.						
SIB-LINGS	A	S	8	4	7	19
	A	U	2	-	4	6
	$\overline{A}$	-	20	6	19	45
	Total		30	10	30	70
A v. $\overline{A}$, Chi-Square = <df, 2df, n.s.; S v. U, p .05, Fisher's Exact Test, n.s.						
SPOUSE	A	S	8	3	6	17
	A	U	11	2	3	16
	$\overline{A}$	-	11	5	21	37
	Total		30	10	30	70
A v. $\overline{A}$, Chi-Square = 6.7, 2df, $p<.05$; S v. U, $p>.05$, Fisher's Exact Test, n.s.						
CHIL-DREN	A	S	0	0	1	1
	A	U	4	0	0	4
	$\overline{A}$	-	26	10	29	65
	Total		30	10	30	70
No testable effect of either variable.						

N.B. A, S = Available and Supportive; A, U = Available and Unsupportive

$\overline{A}$ = Not available

TABLE 47

AVAILABILITY AND RATED SUPPORTIVENESS BY TREATMENT CONDITION FOR SIGNIFICANT OTHERS : NON-FAMILY

Significant other	Availability	Supportiveness	Condition			
			DC	IR	FI	Total
FRIENDS	A	S	14	7	26	47
	A	U	16	3	3	22
	$\bar{A}$	-	0	0	1	1
	Total		30	10	30	70
A v. $\bar{A}$, not testable; S v. U, Chi-Square=12.4, 2df, p<.01						
STRANGERS	A	S	2	2	4	8
	A	U	4	-	-	4
	$\bar{A}$	-	24	8	26	58
	Total		30	10	30	70
A v. $\bar{A}$, not testable; S v. U, p>.05, Fisher's Exact Test, n.s.						
DOCTORS/SOCIAL AGENCIES	A	S	6	3	12	21
	A	U	24	7	18	49
	$\bar{A}$	-	0	0	0	0
	Total		30	10	30	70
A v. $\bar{A}$, not testable; S v. U, Chi-Square=2.9, 2df, n.s.						
OTHER RELATIVES	A	S	0	0	6	6
	A	U	8	0	2	10
	$\bar{A}$	-	22	10	22	54
	Total		30	10	30	70
A v. $\bar{A}$, no difference; S v. U, p<.01, Fisher's Exact Test.						
BOSS	A	S	9	4	19	32
	A	U	18	5	7	30
	$\bar{A}$	-	3	1	4	8
	Total		30	10	30	70
A v. $\bar{A}$, not testable; S v. U, Chi-Square=11.6, 2df, p<.01						

N.B. A, S = Available and Supportive;
A, U = Available and Unsupportive;
$\bar{A}$ = not available

TABLE 48

NUMBER OF SIGNIFICANT OTHERS RATED AS SUPPORTIVE BY TREATMENT CONDITION

Number Rated Supportive	Condition			
	DC	IR	FI	Total
6	-	-	1	1
5	-	1	7	8
4	-	2	7	9
3	5	2	6	13
2	11	4	7	22
1	12	1	2	15
0	2	-	-	2
Total	30	10	30	70
Hi:	5	5	21	31
Lo:	25	5	9	39
Total	30	10	30	70

Chi-Square = 17.6, df = 2, $p<.001$

Coefficient alpha = 0.17

TABLE 49

NUMBER OF SIGNIFICANT OTHERS RATED AS UNSUPPORTIVE BY TREATMENT CONDITION

Number Rated Unsupportive	Condition			
	DC	IR	FI	Total
6	-	-	-	-
5	3	-	1	4
4	12	-	-	12
3	5	4	8	17
2	6	3	9	18
1	4	2	5	11
0	-	1	7	8
Total	30	10	30	70
Hi:	20	4	9	33
Lo:	10	6	21	37
Total	30	10	30	70

Chi-Square = 7.9, 2 df, $p<.02$

Coefficient alpha = 0.29

TABLE 50

SUPPORT BALANCE SCORE BY TREATMENT CONDITION

Support Balance Score	Condition			
	DC	IR	FI	Total
+6	-	-	1	1
+5	-	-	3	3
+4	-	2	2	4
+3	-	-	5	5
+2	2	2	6	10
+1	4	1	4	9
0	4	1	4	9
-1	3	3	3	9
-2	6	1	1	8
-3	6	-	-	6
-4	5	-	1	6
Total	30	10	30	70
Hi:	6	5	21	32
Lo:	24	5	9	38
Total	30	10	30	70

Chi-square = 13.3, 2 d.f., $p<.001$

Coefficient alpha = 0.41

F. Predictors of Outcome

The differences berween groups in affective distress and marital status may have been responsible for some of the outcome differences. If crisis intervention theory is correct, the difference in supportiveness of significant others would have mediated the outcome differences. Variations in stress between event and follow-up may also have had an effect.

To test these, an overall outcome index was devised and its relationship within conditions to each mediating variable was examined. If a variable does not affect individual differences in outcome within a condition it is unlikely to be responsible for large differences between conditions.

1. Construction of Within Group Outcome Score

This score was constructed from the six relatively objective outcome measures based on standard questionnaires, viz., Langner Scale, Langsley Symptoms, Work Adjustment, Bradburn Pleasant and Unpleasant Affect and the Health Questionnaire.

To check that a meaningful single index could be constructed, the relationship between each pair of these measures was examined separately for each condition. Two by two contingency tables were constructed for each pair within each treatment condition. Scores were dichotomised as nearly as possible around the median for the condition. Thus, the element of "ecological correlation" due to co-variation across conditions of treatment affects on different measures was removed.

Tables 51 to 53 present the results for DC, IR and FI conditions respectively.

The frequencies were summed across conditons to form Table 54 which shows the relationship between individual differences in outcome on different measures with all contributions from treatment effects removed.

All relationships were significant except for Bradburn Pleasant Affect with Bradburn Unpleasant Affect. This is consistent with the relevant literature (Bradburn, 1969; Gaitz and Scott, 1971). The significant relationship of Pleasant Affect to Langner and other malaise measures was not expected (cf Gaitz and Scott, 1971).

These results justified construction of a Within Group Outcome Score. Each of the six measures was divided within conditions into Poorer and Better relative to that condition. The W.G.O.S. for a subject was the total number of Poorer outcomes. Co-efficient alpha for this score was satisfactory (0.83).

2. Affective Disturbance and Within Group Outcome

Table 55 presents the relationship of W.G.O.S. to overall affective disturbance. There is no relationship within any condition (tested by Fisher's Exact Test) nor is there any when frequencies are summed across conditions (chi-square n.s.). Note, between condition differences in affective disturbance were removed when testing this relationship.

3. Effect of Availability of Parents and Spouse.

Table 56 presents the relationship of availability of mother, of father and of spouse for all conditions combined. This was important as FI subjects may have been under stress due to a financially dependent spouse while DC subjects may have received at least practical support from parents.

The lack of any relationship between availability and within-group outcome suggests that this confounding of treatment with marital status did not produce the outcome differences between conditions.

4. Number of Stress Areas and Outcome.

Table 57 presents the relationship between within group outcome and number of stress areas reported as a problem since the accident. The lack of a significant relationship suggests this is not a mediator of outcome although there is a slight trend.

5. Quality of Support and Outcome.

Table 58 to 50 respectively present the within group relationship between outcome and number of supportive significant others, number of unsupportive significant others and Support Balance Score.

These demonstrate that more support is associated with better outcome within groups, with the relationship being significant for number unsupportive and for support balance.

TABLE 51

RELATIONSHIPS BETWEEN SIX OUTCOME MEASURES IN THE DELAYED CONTACT GROUP (DC)

MEASURES	LANGSLEY SYMPTOMS SCALE	WORK ADJUSTMENT	BRADBURN PLEASANT AFFECT	BRADBURN UNPLEASANT AFFECT	HEALTH QUESTIONNAIRE
LANGNER	B P T P 6 9 15 B 12 3 15 T 18 12 30	B P T 3 12 15 14 1 15 17 13 30	B P T 4 11 15 12 3 15 16 14 30	B P T 5 10 15 12 3 15 17 13 30	B P T 3 12 15 12 3 15 15 15 30
LANGSLEY SYMPTOMS SCALE		P 3 9 12 B 14 4 18 T 17 13 30	4 8 12 12 6 18 16 14 30	3 9 12 14 4 18 17 13 30	2 10 12 13 5 18 15 15 30
WORK ADJUSTMENT			P 5 8 13 B 11 6 17 T 16 14 30	3 10 13 14 3 17 17 13 30	4 9 13 11 6 17 15 15 30
BRADBURN PLEASANT AFFECT				P 7 7 14 B 10 6 16 T 17 13 30	4 10 14 11 5 16 15 15 30
BRADBURN UNPLEASANT AFFECT					P 5 9 14 B 10 6 16 T 15 15 30

N.B. P = Poorer Outcome; B = Better Outcome; T = Total

TABLE 52

RELATIONSHIPS BETWEEN SIX OUTCOME MEASURES IN THE IMMEDIATE REVIEW GROUP (IR)

MEASURES	LANGSLEY SYMPTOMS SCALE	WORK ADJUSTMENT	BRADBURN PLEASANT AFFECT	BRADBURN UNPLEASANT AFFECT	HEALTH QUESTIONNAIRE
LANGNER SCALE	B P T P – 5 5 B 4 1 5 T 4 6 10	B P T – 5 5 5 – 5 5 5 10	B P T 1 4 5 5 – 5 6 4 10	B P T – 5 5 5 – 5 5 5 10	B P T – 5 5 5 – 5 5 5 10
LANGSLEY SYMPTOMS SCALE		P 1 5 6 B 4 – 4 T 5 5 10	2 4 6 4 – 4 6 4 10	1 5 6 4 – 4 5 5 10	1 5 6 4 – 4 5 5 10
WORK ADJUSTMENT			P 1 4 5 B 5 – 5 T 6 4 10	– 5 5 5 – 5 5 5 10	– 5 5 5 – 5 5 5 10
BRADBURN PLEASANT AFFECT				P – 4 4 B 5 1 6 T 5 5 10	– 4 4 5 1 6 5 5 10
BRADBURN UNPLEASANT AFFECT					P – 5 5 B 5 – 5 T 5 5 10

N.B. P = Poorer Outcome; B = Better Outcome; T = Total

TABLE 53

RELATIONSHIPS BETWEEN SIX OUTCOME MEASURES IN THE FULL INTERVENTION GROUP (FI)

MEASURE	LANGLSEY SYMPTOMS SCALE			WORK ADJUSTMENT			BRADBURN PLEASANT AFFECT			BRADBURN UNPLEASANT AFFECT			HEALTH QUESTIONNAIRE		
		B	P	T	B	P	T	B	P	T	B	P	T	B	P	T
LANGNER SCALE	P	-	7	7	1	6	7	1	6	7	-	7	7	1	6	7
	B	13	10	23	15	8	23	14	9	23	13	10	23	14	9	23
	T	13	17	30	16	14	30	15	15	30	13	17	30	15	15	30
LANGSLEY SYMPTOMS SCALE	P	6	11	17	8	9	17	2	15	17	5	12	17			
	B	10	3	13	7	6	13	11	2	13	10	3	13			
	T	16	14	30	15	15	30	13	17	30	15	15	30			
WORK ADJUSTMENT	P	5	9	14	3	11	14	4	10	14						
	B	10	6	16	10	6	16	11	5	16						
	T	15	15	30	13	17	30	15	15	30						
BRADBURN PLEASANT AFFECT	P	6	9	15	6	9	15									
	B	7	8	15	9	6	15									
	T	13	17	30	15	15	30									
BRADBURN UNPLEASANT AFFECT	P	4	13	17												
	B	11	2	13												
	T	15	15	30												

N.B. P = Poorer Outcome; B = Better Outcome; T = Total

TABLE 54

RELATIONSHIPS BETWEEN INDIVIDUAL DIFFERENCES ON SIX OUTCOME MEASURES FOR ALL GROUPS WITH GROUP DIFFERENCES REMOVED

MEASURES	LANGSLEY SYMPTOMS SCALE	WORK ADJUSTMENT	BRADBURN PLEASANT AFFECT	BRADBURN UNPLEASANT AFFECT	HEALTH QUESTIONNAIRE
LANGNER SCALE	B P T P 6 21 27 B 29 14 43 T 35 35 70	B P T P 4 23 27 B 34 9 43 T 38 32 70	B P T P 5 22 27 B 32 11 43 T 37 33 70	B P T P 4 23 27 B 31 12 43 T 35 35 70	B P T P 4 23 27 B 31 12 43 T 35 35 70
	x^2 15.8 p <.001	27.6 <.001	20.8 <.001	21.8 <.001	21.8 <.001
LANGSLEY SYMPTOMS SCALE		P 10 25 35 B 28 7 35 T 38 32 70	14 21 35 23 12 35 37 33 70	5 30 35 30 5 35 35 35 70	7 28 35 28 7 35 35 35 70
		x^2 18.7 p <.001	4.64 <.05	35.7 <.001	25.2 <.001
WORK ADJUSTMENT			P 11 21 32 B 26 12 38 T 37 33 70	6 26 32 29 9 38 35 35 70	8 24 32 27 11 38 35 35 70
			x^2 8.08 p <.01	23.0 <.001	14.7 <.001
BRADBURN PLEASANT AFFECT				P 13 20 33 B 22 15 37 T 35 35 70	10 23 33 25 12 37 35 35 70
				x^2 2.8 p n.s.	9.7 <.01
BRADBURN UNPLEASANT AFFECT					P 7 28 35 B 28 7 35 T 35 35 70
					x^2 25.2 p <.001

TABLE 55

TOTAL AFFECTIVE RESPONSES RATED 4+ OVER ALL PHASES BY TREATMENT CONDITION BY WITHIN GROUP OUTCOME SCORE

WGOS	Number Rated 4+	Condition											
		DC			IR			FI			ALL		
		Lo	Hi	T	Lo	Hi	T	Lo	Hi	T	Lo	Hi	T
6		4	2	6	1	3	4	4	2	6	9	7	16
5		1	-	1	1	-	1	1	1	2	3	1	4
4		1	3	4	-	-	-	1	2	3	2	5	7
3		3	2	5	-	-	-	2	1	3	5	3	8
2		1	2	3	-	-	-	2	5	7	3	7	10
1		3	1	4	-	1	1	1	4	5	4	6	10
0		3	4	7	3	1	4	2	2	4	8	7	15
Total		16	14	30	5	5	10	13	17	30	34	36	70
Hi:		9	7	16	2	3	5	8	6	14	19	16	35
Lo:		7	7	14	3	2	5	5	11	16	15	20	35
Total		16	14	30	5	5	10	13	17	30	34	36	70
Chi-Square		-			-			-			<df		
df		-			-			-			1		
p		>.05, ns (Fisher's exact test)			>.05, ns (Fisher's exact test)			>.05,ns (Fisher's exact test)			ns		

Coefficient alpha = 0.83

TABLE 56

WITHIN GROUP OUTCOME SCORE BY AVAILABILITY OF MOTHER, FATHER AND SPOUSE

Availability	Figure								
	Mother			Father			Spouse		
	$\overline{A}$	A	T	$\overline{A}$	A	T	$\overline{A}$	A	T
6	8	8	16	11	5	16	9	7	16
5	2	2	4	2	2	4	–	4	4
4	3	4	7	4	3	7	4	3	7
3	4	4	8	4	4	8	5	3	8
2	5	5	10	6	4	10	2	8	10
1	6	4	10	7	3	10	8	2	10
0	9	6	15	12	3	15	9	6	15
Total	37	33	70	46	24	70	37	33	70
Hi:	17	18	35	21	14	35	18	17	35
Lo:	20	15	35	25	10	35	19	16	35
Total	37	33	70	46	24	70	37	33	70
Chi-Square:		<df			<df			<df	
df		1			1			1	
p		n.s.			n.s.			n.s.	

TABLE 57

NUMBER OF STRESS AREAS REPORTED AS A PROBLEM SINCE THE ACCIDENT BY TREATMENT CONDITION BY WITHIN GROUP OUTCOME SCORE

WGOS	Number Reported	Condition											
		DC			IR			FI			ALL		
		Lo	Hi	T	Lo	Hi	T	Lo	Hi	T	Lo	Hi	T
6		1	5	6	1	3	4	1	5	6	3	13	16
5		-	1	1	1	-	1	-	2	2	1	3	4
4		1	3	4	-	-	-	3	-	3	5	2	7
3		4	1	5	-	-	-	2	1	3	6	2	8
2		1	2	3	-	-	-	3	4	7	4	6	10
1		2	2	4	-	1	1	4	1	5	6	4	10
0		5	2	7	3	1	4	1	3	4	9	6	15
Total		14	16	30	5	5	10	14	16	30	34	36	70
Hi:		6	10	16	2	3	5	6	8	14	15	20	35
Lo:		8	6	14	3	2	5	8	8	16	19	16	35
Total		14	16	30	5	5	10	14	16	30	34	36	70
Chi-Square			-			-			-			<df	
df			-			-			-			1	
p		>.05, n.s. (Fisher's exact test)			>.05, n.s. (Fisher's exact test)			>.05, n.s. (Fisher's exact test)				n.s.	

TABLE 58

NUMBER OF SIGNIFICANT OTHERS RATED SUPPORTIVE (S) BY TREATMENT CONDITION BY WITHIN GROUP OUTCOME SCORE

		Condition											
		DC			IR			FI			ALL		
WGOS	S:	Lo	Hi	T	Lo	Hi	T	Lo	Hi	T	Lo	Hi	T
6		3	3	6	4	-	4	4	2	6	11	5	16
5		1	-	1	-	1	1	2	-	2	3	1	4
4		2	2	4	-	-	-	1	2	3	3	4	7
3		2	3	5	-	-	-	2	1	3	4	4	8
2		1	2	3	-	-	-	4	3	7	5	5	10
1		3	1	4	1	-	1	1	4	5	4	5	9
0		-	5	7	-	4	4	1	3	4	4	12	16
Total		14	16	30	5	5	10	15	15	30	34	36	70
Hi:		8	8	16	4	1	5	9	5	14	21	14	35
Lo:		6	8	14	1	4	5	6	10	16	13	22	35
Total		14	16	30	5	5	10	15	15	30	34	36	70
Chi-Square			-			-			-			3.7	
df			-			-			-			1	
p			>.05, n.s. (Fisher's exact test)			>.05, n.s. (Fisher's exact test)			>.05, n.s. (Fisher's exact test)			.10>p>.05 n.s.	

TABLE 59

NUMBER OF SIGNIFICANT OTHERS RATED UNSUPPORTIVE (U) BY TREATMENT CONDITION BY WITHIN GROUP OUTCOME SCORE

		Condition											
		DC			IR			FI			ALL		
WGOS	U:	Lo	Hi	T	Lo	Hi	T	Lo	Hi	T	Lo	Hi	T
6		1	5	6	-	4	4	-	6	6	1	15	16
5		-	1	1	1	-	1	1	1	2	2	2	4
4		1	3	4	-	-	-	2	1	3	3	4	7
3		4	1	5	-	-	-	1	2	3	5	3	8
2		2	1	3	-	-	-	4	3	7	6	4	10
1		1	3	4	1	-	1	2	3	5	4	6	10
0		6	1	7	4	-	4	2	2	4	12	3	15
Total		15	15	30	6	4	10	12	18	30	33	27	70
Hi:		6	10	16	1	4	5	5	10	15	11	24	35
Lo:		9	5	14	5	0	5	7	8	15	22	13	35
Total		15	15	30	6	4	10	12	18	30	33	37	70
Chi-Square			-			-			-			6.9	
df			-			-			-			1	
p			>.05, n.s. (Fisher's exact test)			<.05 (Fisher's exact test)			>.05, n.s. (Fisher's exact test)			<.05	

TABLE 60

SUPPORT BALANCE SCORE (S.B.) BY TREATMENT CONDITION BY WITHIN GROUP OUTCOME SCORE

		Condition											
		DC			IR			FI			ALL		
WGOS	S.B.	Lo	Hi	T	Lo	Hi	T	Lo	Hi	T	Lo	Hi	T
6		6	-	6	4	-	4	5	1	6	15	1	16
5		1	-	1	-	1	1	1	1	2	2	2	4
4		3	1	4	-	-	-	1	2	3	4	3	7
3		2	3	5	-	-	-	2	1	3	4	4	8
2		1	2	3	-	-	-	4	3	7	5	5	10
1		3	1	4	1	-	1	1	4	5	5	5	10
0		1	6	7	-	4	4	-	4	4	1	14	15
Total		17	13	30	5	5	10	14	16	30	36	34	70
Hi:		12	4	16	4	1	5	9	5	14	25	10	35
Lo:		5	9	14	1	4	5	5	11	16	11	24	35
Total		17	13	30	5	5	10	14	16	30	36	34	70
Chi-Square			-			-			-			14.6	
df			-			-			-			1	
p			>.05 (Fisher's exact test)			>.05, n.s. (Fisher's exact test)			>.05, n.s. (Fisher's exact test)			<.01	

6. Summary of Mediating Effects.

Thus, quality of support is the only variable found to mediate outcome differences. This reduces concern about between-condition differences in marital status and in affective response to the event. These are unlikely to cause large differences in outcome between conditions as they do not affect outcome differences within conditions. The lack of a within-group affect of stresses suggests, taken with other results that crisis intervention does not prevent stress but rather is effective by reducing long-term affective reactions and by mobilising more effective use of personal and social resources.

G. Effect of Worker (Social Worker A, B and C)

For each outcome measure, each pair of social workers was compared (i.e. A v. B, A v. C, B v. C) using a median test with significance level determined by Fisher's Exact Test (Seigal, 1956). None of the comparisons was significant. The A v. B and B v. C comparisons for the Langner scale did show a non-significant trend. Worker B had more Langner scores that were Borderline or Disturbed (Table 61).

The Within Group Outcome Score does not remove variation between groups defined by worker. Comparing outcomes for the workers using this score, there is no overall difference by a median test (Table 62). There was a trend for the poorer outcomes of worker B to be more consistently worse on all measures.

Overall there was no reason to conclude that the workers were differentially effective.

TABLE 61

OUTCOME CATEGORY BY SOCIAL WORKER FOR SIX MEASURES WITHIN THE FULL INTERVENTION CONDITION (FI)

Social Worker		Langner Scale				Langsley Symptom Scale				Work Adjustment				Bradburn Positive Affect				Bradburn Negative Affect				Health Questionnaire			
		A	B	C	T	A	B	C	T	A	B	C	T	A	B	C	T	A	B	C	T	A	B	C	T
OUTCOME	Poorer	1	4	2	7	6	6	5	17	3	6	5	14	6	4	7	17	6	6	5	17	4	5	6	15
	Better	9	6	8	23	4	4	5	13	7	4	5	16	4	6	3	13	4	4	5	13	6	5	4	15
Total		10	10	10	30	10	10	10	30	10	10	10	30	10	10	10	30	10	10	10	30	10	10	10	30

TABLE 62

OUTCOME SCORE BY SOCIAL WORKER WITHIN THE FULL INTERVENTION CONDITION (FI)

Outcome Score	Worker			
	A	B	C	Total
6	1	4	1	6
5	1	-	1	2
4	1	-	2	3
3	1	1	1	3
2	3	2	2	7
1	1	1	3	5
0	2	2	-	4
Total	10	10	10	30
Poorer	4	5	5	14
Better	6	5	5	16
Total	10	10	10	30

CHAPTER VII:

DISCUSSION, IMPLICATIONS AND CONCLUSIONS

A. Conclusions about Hypotheses

In this section, the results are considered in relation to each general hypothesis and in relation to the specific predictions based on each general hypothesis.

(1) General Hypothesis 1

That road trauma leading to hospitalisation constitutes a crisis.

The specific prediction based on this hypothesis was: subject's ratings of the level of distress following the accident, admission and hospital treatment will indicate that unpleasant affect and cognitive disruption were elevated when compared by subjects to their prior experience. The results presented in Section C (Immediate Response to the Accident Event and Sequelae) of Chapter VI confirm this prediction. General Hypothesis 1 is thus confirmed by the data and may be accepted as no alternative explanations appear feasible.

(2) General Hypothesis 2

Prompt provision of an opportunity to review the experience of a traumatic crisis and to express the affect involved in the experience assists in the constructive resolution of the crisis.

The specific prediction based on this general hypothesis was: an opportunity to review the experience of injury and hospitalisation and express the feelings involved will results in an improved outcome three to four months later.

Outcome data for the IR condition compared to the DC condition provided a direct test of this prediction (see Chapter VI, Section D). Outcome results for the IR condition were consistently better than outcome results for the DC condition (cf Tables 27 to 41). The immediate review alone was insufficient to return all these subjects to normal (cf Table 41).

The differences in affective response to the event (cf Chapter VI, Section C) create some uncertainty about the proper conclusion here, as the IR subjects generally reported less distress than DC subjects. This lack of equivalence does not completely invalidate acceptance of the hypothesis as affective response was not related to outcome within treatment conditons. Thus there was tentative support for the hypothesis, but further work is required before it can be confidently accepted (see Section C of this chapter).

(3) General Hypothesis 3

(a) Provision of brief crisis intervention oriented to foster active coping with the emotional and practical consequences produced by a traumatic crisis makes a contribution to construction resolution of the crisis additional to the contribution from immediate review of the crisis experience;

(b) the above hypothesis (3a) applies only if the interveners function at above a minimally facilitative level on Carkhuff's (1969 a) general facilitation scale.

Specific predictions based on the hypothesis were: (a) additional crisis intervention by a facilitative intervener will result in better outcome three to four months after the event than will immediate review alone; (b) that different interveners who are all facilitative will produce no differences in outcome.

Prediction (a) was tested by comparing the outcome results for the FI subjects to the outcome results for IR and DC subjects (cf Chapter VI, Section D). For conclusions drawn from these results to be valied, there should be no confounding differences between the treatment conditions. Differences were found in marital status (and consequently in the availability of parents and of spouse) and in intensity of affective response to the event.

Careful examination of these differences (cf Chapter VI, Sections E and F) made it clear that they could not have been responsible for the large differences in outcome (cf Tables 27 to 41). Other competing explanations for the results must be considered. It could be argued that all the outcome measures were subjective and that FI subjects consistently reported more favourably on themselves because they had received some attention, i.e. (a) that the effects were real, but that non-specific or placebo effects were responsible (cf Frank, 1961); or (b) the effects were simply on response sets and not on actual wellbeing or behaviour. The possibility of a <u>real effect</u> due to non-specific factors could be ruled out by a design that included an "attention-only" control condition with no specific intervention techniques applied. Another design would offer one, two or all three components of crisis intervention (i.e. ventilation, practical support and mobilisation of social support)

to different groups. If each component made its own contribution to outcome, and particularly if each component had different specific effects on outcome, a "placebo" explanation could be ruled out.

The present exploratory study did not allow for such complex designs. It did show that crisis intervention had a considerable effect and thus further work to identify what outcome is specific to the approach would be justified.

The criticism of the effects as "mere response set" would best be answered by longer follow up with objective indices such as days lost from work, length of hospital stay, levels of sedative and analgesic medication and subsequent physical illnesses and emotional and social disturbance. The collection of such data over a meaningful period was not possible in this study.

Several of the measures used have been found to correlate with various objective indices. Langsley's Job Performance scale is stated in terms of concrete behaviours such as lateness, absenteeism and disputes with boss and co-workers. Thus, a pure "response set" effect is unlikely. Also, there were measures where group differences did not emerge. These were: risk to life (Table 11); attribution of responsibility (Table 12); affective response to the accident (Tables 13 and 14); reported amnesia (Table 15); desire for information (Table 20); perception of event (Table 22); intrusive throughts (Table 23) and disturbance when recalling event (Table 24); overall affective response (Table 25); confidence in doctors and

nurses (Table 26); stresses before the event (Tables 8 and 9) and since the accident (Table 31); helpful and unhelpful contacts with "care givers" (Tables 43 and 44); and hierarchy of help seeking (Table 45).

The differences between treatment conditions were thus in specific areas where crisis intervention theoretically should have had an impact, and not in those where no impact was expected. Thus a generalised "halo" effect seems an uneconomical explanation of the results.

Prediction (b) was tested by comparing outcome for subjects within the FI condition, grouped by worker. The prediction was confirmed (cf Tables 61 and 62). Thus, any facilitative intervener adopting the same general approach used in this study could be expected to return victims of a traumatic crisis to pre-crisis levels of adjustment.

With the qualifications that longer follow-up and more objective outcome measures would be desireable, General Hypothesis 3 may be considered as supported. It cannot be generalised to crisis intervention by any person, whether professional or not, as the interveners were selected to be facilitative. The evidence that unfacilitative "helpers" may damage the adjustment of people at risk (cf Carkhuff, 1969 a) suggests care is needed in selection of crisis intervention workers.

(4) General Hypothesis 4

Crisis intervention will increase the supportiveness of the subject's social network and subjects with more supportive network will resolve the crisis more successfully.

The specific predictions based on this hypothesis were:

(a) subjects receiving full intervention will report more constructive and less destructive relationships with available significant others;

(b) within treatment conditions, subjects with better outcomes will report more constructive and less destructive relationships with available significant others.

Results presented in Chapter VI, Section E confirm prediction (a). The only challenges to this would be the "response set" explanation which has already been shown to not fit the data; and the differences in availability of parents versus spouse. Results in Section F, Tables 58 to 60 provided clear support for prediction (b). Table 56 gave evidence that the difference in availability of specific others was not likely to have produced the otucome effects observed.

Thus General Hypothesis 4 was confirmed. More confidence could be placed in this conclusion if direct measures of the interaction with significant others were obtained by recording and rating actual interaction samples. The measures used in this study rely on the subject's reports of significant others' behaviour.

The tendency in the literature to consider availability and ignore quality of support is unfortunate given these findings. The

evidence in Table 56 that sheer availability of parents and spouse was unrelated to outcome confirms the general conclusion from research into the helping process: helping may be for better or for worse, with the outcome determined by the quality of the relationship.

The results suggest that Carkhuff's "core conditions" (empathy, respect and genuineness) may be critical dimensions of the quality of support.

(5) Methodological Hypothesis

In general, it was expected that there would be no differences between treatment conditions before intervention occurred. This was confirmed for the majority of variables assesses relating to demographic characteristics (see Chapter VI, Section B), and to stress before and during the crisis event (Section C).

Differences in marital status and in intensity of affective response were found. The implications of these for the validity of drawing conclusions from the data have been discussed where relevant. Clearly the lapse of time alone was not sufficient in itself to blur recall of the intensity of affective responses. The extended period of distress experienced by the DC subjects and evident in their outcome results may have increased the recalled severity of disturbance during hospitalisation. In any case, differences were largely in the extremity of affect ratings. The recall data were sufficiently similar to the immediate reports to suggest that retrospective affect ratings may be used to determine whether a past event was experienced as traumatic, at least for highly disruptive events.

(6) Summary of Conclusions

1. The event was highly stressful and disruptive.

2. Crisis intervention normalised a group who, without intervention, would have been very disturbed.

3. Immediate review of the event and associated experiences may have a helpful impact for about half of a group at risk. This conclusion is open to question as the relevant subjects less often reported the crisis experience itself as highly stressful.

4. The mere availability of significant others had no effect on outcome.

5. The perceived supportiveness of significant others was enhanced by crisis intervention and was higher for individuals with better outcomes. Thus the quality of support may mediate the effectiveness of crisis intervention.

6. Where affective disturbance is high and stress frequent, variations in these have no effect on variations in outcome. (NB: if a sufficient number of subjects had been undisturbed by the event and exposed to little or no subsequent stress, these variables may also have had an impact on outcome).

7. Thus, crisis intervention apparently achieved its effects by enhancing subject's capacity to deal with the disruptive impact of the event through mobilisation of personal and social resources. It does not prevent distress and the only stress it reduced was financial.

B. Implcations for Practice

The implications stated here follow fairly directly from the data or from clinical impressions gained during the study.

1. Quite brief intervention was sufficient to overcome the disruptive impact of a highly stressful experience. Thus, to meet the need revealed by the study (see (2) below) does not require a major increase in manpower.

2. Since hospital treatment for road trauma was so stressful it is reasonable to expect that many hospital patients are at risk for major disruption of their usual level of functioning. In-patient treatment for apparently purely "physical" conditions has major social and psychological consequences that continue after discharge.

3. The need for help revealed in (2) above is typically not met by established hospital practices.

4. This need could be met by a multi-stage system. The stresses and reactions of all patients could be routinely assessed and ventialtion facilitated through interviews by selected and trained volunteers or nurses, with further intervention for those patients who require it provided by more specialised personnel.

5. In making such interventions, actively linking the patient with established sources of help is essential. Provision of information alone is often insufficient. Action to directly initiate contact (e.g. by taking the patient to an agency, or introducing agency personnel to the patient) is often necessary. The sooner

links are made the more effective the patient's use of them is likely to be.

6. The absence of referrals by health care staff of DC condition patients, and these patients' ratings of the "support" received from doctors and social agencies reveal a need to train personnel in basic support skills, in recognition of individual's needs for active assistance and in the skills required to link the person at risk to effective assistance.

7. One form of intervention worth a trial is to train significant others of persons at risk in the basic support skills of "good listening" (empathy, respect and genuineness).

8. Trials of programs to alert the public to recognise when they and others are in crisis, and to encourage appropriate coping behaviour (e.g. talking over one's feelings, asking for information and assistance etc) should be carried out.

9. It was noticeable that patients in this study were often placed together in hospital wards because of similarity of age, injuries and behaviour. At least during the intervention period, these "groups" appeared to provide considerable mutual support. A program to deliberately foster such support is worth a trial. A similar program drawing together significant others of patients in similar plights could also prove worthwhile. This could be combined with the suggestion in (7) above.

10. The mobility of most of these patients was restricted. This prevented them from acting for themselves to obtain sickness benefits and deal with other similar practical problems. It

would be useful to establish a routine system to identify such needs, explain fully the available courses of action and to actively bridge gaps created by the patient's physcial limitations.

11. A theme running through all these suggestions is the importance of active reaching out. People in crisis often do not ask for or act to obtain necessary help. Direct contact and active encouragement of help seeking is necessary. Static crisis services which wait for clients to take the initiative miss major parts of the need the exists in the community and often make contact later than is desireable.

C. Further Research

1. An immediate need is to replicate and extend the present study with random allocation to all treatment conditions, repeated measures throughout the event and follow-up period, and using a longer follow-up period with a variety of outcome measures which do not depend on self-report (as suggested in discussion of General Hypothesis 3). Measurement of impact on significant others would also be most valuable as a basis for devising effective forms of "total care".

2. A study of the effects of immediate review (one-session intervention) which could also establish criteria for screening people who require more extended help would be of great practical value.

3. Based on (2) above, an evaluation of a multi-stage intervention system (see practical implication 4) could be carried out.

4. Studies to compare the effects of each component of crisis intervention singly and combined with one other might improve the specificity of action to meet specific need.

5. It would be useful to investigate other classes of patients to determine which are at risk. In general, studies to identify more at risk groups would be valuable in identifying unmet community need.

6. Similar studies to demonstrate the effectiveness or otherwise of crisis intervention with other at risk groups are essential. Continued dissemination of an inadequately evaluated approach is indefensible as the present study demonstrated that evaluation can be carried out with minimal resources.

7. As a preliminary to any further studies comparing groups exposed to different interventions, a series of careful studies of single cases would be invaluable. Measures such as the Bradburn scales could be used repeatedly to trace the immediate impact of planned interventions. The size and consistency of the outcome differences suggests that individual case studies could be very effective in identifying interventions that deserve larger-scale trials.

8. Another useful variation on the present study would be to vary the background and sophistication of the interveners. This would allow tests of issues such as: the effects of variations in facilitative skill; the effectiveness of non-professionals given different levels of training supervision; and the utility of calling on people who have previously experienced a similar crisis to provide guidance to others currently at risk.

9. Within the context of some of the other suggested studies the impact of "mere attention" with no specific technical interventions could be assessed. If attention alone has a strong impact this has major implications for practice and theory.

10. A different style of investigation with high potential return is to identify people who resolved crises constructively without use of formal helping services and to attempt to identify what was responsible for the good outcome. The investigation of the impact of quality of support on outcome within treatment conditions in the present study was a simple attempt to use this general approach.

11. Further studies to devise more sensitive and objective measures of the quality of support should be fruitful. Assessment of actual interactions by rating recording or by participant observation could be tried.

12. A study to test whether actively initiating contact between client and sources of help is more effective than passive referral would have considerable practical value (cf Wolkon et al 1972).

13. Any program to train health care workers to recognise and respond to patients in crisis should be evaluated by measuring changes in referral practices.

14. Trials of programs designed to foster public recognition of and coping with crises (whether personal crises or community wide disasters) should have evaluation measures built in.

15. A study to test the effects of mutual support groups among patients and among significant others facing similar crises would be very valuable. Again, in-built evaluation is an essential element of any trial program.

16. If a system is established to provide more active assistance to overcome the stressful effects of physical limits created during illness episodes, some means of evaluating the impact of the system should be included in it.

Overall, there are many suggestions available from prior research into the natural course followed by crises. What is needed now is research to test out the value of these suggestions in practice and establish the scope of effective application of the crisis approach. The present study simply demonstrated that there is an area which can and should be investigated empirically. This is barely a start on the many fruitful avenues that deserve exploration. It is the author's hope that this study will stimulate others to enter this new and exciting field. Clearly, it <u>can</u> be done.

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APPENDIX A

CRISIS INTERVENTION - INTAKE INTERVIEW

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CRISIS INTERVENTION - INTAKE INTERVIEW

INTERVIEW SCHEDULE

CODE NO. DATE PLACE

FIRSTLY - we would like to know some routine details about yourself:

DATE OF BIRTH: ....
(day) (month) (year)

MARITAL STATUS: M SING. DIVOR. SEPAR.

INFORMATION CONCERNING LIVING CHILDREN:
(please give sex and date of birth of child)

COUNTRY OF YOUR BIRTH:

YOUR RELIGION:

YOUR OCCUPATION:

THE HIGHEST CLASS COMPLETED IN SCHOOL:

CRISIS INTERVENTION: INTAKE INTERVIEW

(Interviewer introduces herself, attempting to establish right from the beginning as relaxed an atmosphere as possible. The ultimate goal of the research is pointed out - namely, to learn from individual patients some of their own feelings, thoughts and difficulties that may have occurred following their accidents, so that a practical program of support and assistance may be worked out to meet the needs of those who may find themselves in similar situations in the future. After thanking interviewee for co-operation the interviewer explains that for professional purposes a few notes will be taken as the interview proceeds, but that complete confidentiality will be respected. While expressing the hope that the interviewee will feel able to discuss his situation with complete frankness, she makes it clear that no pressure will be put on them to disclose anything they may wish to withhold.)

(I) Immediate focus on crisis situation

Question: Could you tell me about your accident?

(II) Nature of precipitating factor ascertained

Kind:

Severity:

Persons involved:

Question: Could you recall the sort of things that ran through your mind at the time of the accident?

Check: Risk to life? Slight Moderate Great

Attribution of responsibility? ME HIM CIRCUMSTANCES

Question: Could you recall your feelings during or immediately following the accident?

"I will read you a list of feelings people commonly have after an accident. Tell me which ones you had and how strongly you felt them."

(I) Numb, deadened, turned off, switched off, not real.

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt

(II) Confused, uncertain, doing odd things, out of control.

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt

(III) Helpless, worried what will happen, vague fear.

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt

(IV) Fear of injury

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt

(V) Fear of death

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt

(VI) Fear of hurting/killing others, guilt.

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt

(VII) Fear of punishment

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt

(VIII) Recollection of what has happened (amnesia).

Completely clear	Partial - remember some, some parts hazy	Few details clear mostly hazy	No recollection at all

Question: What were the most unpleasant things about the accident?

Question: How much disruption has it produced in your life?

Increases rewards	no change	some limitations	considerable limitations	severe limitations

"Sometimes when people are faced with such situations they see them as a: "

(I) Threat - fear of a possible barrier between you and your need satisfaction

(II) Loss - actual damage, reduction of resources

(III) Challenge - release of energy, feel motivated to handle the situation

Question: Which of these fits your situation best?

Question: What were your feelings following hospital admission?

Feelings check list:

(a) Confused

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt

(b) Helpless

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt
_____	_____	_____	_____	_____

(c) Angry

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt
_____	_____	_____	_____	_____

(d) Fearful

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt
_____	_____	_____	_____	_____

(e) Guilty

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt
_____	_____	_____	_____	_____

(f) Anxious

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt
_____	_____	_____	_____	_____

"Check on each of these feelings in terms of ...."

Question: What was it that made you feel angry?

Question: Could you describe the specific circumstances or events that caused you to feel that way?

Question: How often since the accident have you thought over or repeated in your mind some of the things that happened on the day of your accident?

Many times (not being able to stop thinking about it)	Quite often	2-3 times	Once	Not at all
_____	_____	_____	_____	_____

Question: Do you feel disturbed when you think about the unpleasant experiences you had in connection with your accident?

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt
_____	_____	_____	_____	_____

Question: What are your feelings about being a patient in a hospital?

Question: While lying in the hospital what kind of feelings did you experience?

Feelings check-list:

(A) Fear

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt
_____	_____	_____	_____	_____

(B) Helpless

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt
_____	_____	_____	_____	_____

(C) Frustration (cannot move, reduced interaction, hospital routine, food ...)

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt
_____	_____	_____	_____	_____

(D) Dependant (needing others to do things for me ...)

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt

(E) Freedom from responsibility (secondary gain)

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt

Question: Do you feel that you have as much information about your condition as you would like to?

Question: On the basis of your experiences, what is your opinion of doctors? How much confidence do you have in them?

Absolute complete confidence and trust in them .....

Almost complete confidence and trust in them (only few minor doubts) .....

Fair amount of confidence .....

Slight amount .....

Very little confidence .....

Question: How about the nurses here on this floor? What is your opinion of them?

Absolute complete confidence and trust in them .....

Almost complete confidence and trust in them (only few minor doubts) .....

Fair amount of confidence .....

Slight amount .....

Very little confidence .....

Question: What do you need help with now? Who will you turn to?

Question: What do you think you will need help with once discharged from the hospital? Who will you turn to?

Question: What are the main areas of concern to you?

Check-list:

(a) Personal

(b) Social role

(c) Work

(d) Disciplinary

(e) Finances

(f) Family

Question: Since the accident could you name anybody who has been a source of considerable comfort and support to you?

Question: Who has been the <u>most</u> helpful person(s) during the period since your accident?

Question: Do you feel that any person(s) have let you down since your accident?

Question: How confident are you about being able to handle the various problems that the accident has produced for you?

Sees no problems .....

Very confident - Pretty sure to handle any problem .....

Fairly confident - There may be some difficulties but I will cope all right .....

It's going to be tough but I think I can cope .....

It's really going to be tough and I am not too sure if I can cope .....

It's all too much for me .....

APPENDIX B

CRISIS INTERVENTION - FOLLOW-UP INTERVIEW

APPENDIX B

CRISIS INTERVENTION - FOLLOW-UP INTERVIEW

Question: Did things get better after that?

Question: During hospital stay or since your discharge have any of these things happened to you?

(Feelings check-list for symptoms of traumatic neurosis)

(A) Spells of uncontrollable emotions (anxiety, rage, depression)

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt
_____	_____	_____	_____	_____

(B) Sleep disturbances, insomnia, nightmares.

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt
_____	_____	_____	_____	_____

(C) Loss of cognitive abilities; blocking or partial loss of various personal skills, i.e. inability to concentrate, loss of confidence, other "ego" functions.

Stronger than I have ever felt before	As strongly as I ever have felt it	Moderately - not as strong as it sometimes is	Weak, just noticeable	Not felt
_____	_____	_____	_____	_____

(D) Increased sensitization to threat cues.

Slight ..... Moderate ..... Great

Question: While in hospital what did you need help with? Who did you turn to?

Question: Once discharged from the hospital what did you need help with? Who did you turn to?

Question: After the accident what were the main areas of concern to you?

Check list:

(a) Personal

(b) Social role

(c) Work

(d) Disciplinary

(e) Finances

(f) Family

Question: Who did you turn to with those problems?

Check-list of hierarchy of assistance seeking after the event:

(a) self/no-one

(b) family, intimate friends

(c) larger membership groups where he felt a sense of belonging, i.e. church, work club, etc.

(d) casual acquaintances, strangers

(e) impersonal formal organisations, i.e. community institutions

(1) referred?

(2) familiar with?

Amount of Support

Check-list of specific persons:

MOTHER Available Not available

Question: Were you able to talk with her about how you felt - did she seem to understand your feelings and situation?

Can't talk

Talked but didn't understand

Seemed to understand - could express all my feelings

Helped me to understand better - discovered new feelings

Question: Did she seem to reject you, or to not accept your feelings or to accept you and the way you felt, or even to challenge you to cope better?

Rejected me

Concerned but rejected my feelings

Accepted how I felt, gave me encouragement

Challenged me to face difficulties and overcome them

Question: Did she seem to be hiding how she felt, or pretending in any way or did you feel her reaction was completely open and sincere?

Seemed insincere, just putting on a front

Was helpful but seemed routine, uninvolved

Was helpful, really sincerely concerned and involved

Was sincere and open, but in a way that made me feel worse

FATHER Available Not available

Question: Were you able to talk with him about how you felt - did he seem to understand your feelings and situation?

Can't talk

Talked but didn't understand

Seemed to understand - could express all my feelings

Helped me to understand better - discovered new feelings

Question: Did he seem to reject you, or not accept your feelings or to accept you and the way you felt, or even to challenge you to cope better?

Rejected me

Concerned but rejected my feelings

Accepted how I felt, gave me encouragement

Challenged me to face difficulties and overcome them

Question: Did he seem to be hiding how he felt, or pretending in any way or did you feel his reaction was completely open and sincere?

Seemed insincere, just putting on a front

Was helpful but seemed routine, uninvolved

Was helpful, really sincerely concerned and involved

Was sincere and open, but in a way that made me feel worse

SIBLINGS Available Not available

Question: Were you able to talk with him/her about how you felt- did he/she seem to understand your feelings and situation?

Can't talk

Talked but didn't understand

Seemed to understand - could express all my feelings

Helped me to understand better - discovered new feelings

Question: Did he/she seem to reject you, or to not accept your feelings or to accept you and the way you felt, or even to challenge you to cope better?

Rejected me

Concerned but rejected my feelings

Accepted how I felt, gave me encouragement

Challenged me to face difficulties and overcome them

Question: Did he/she seem to be hiding how he/she felt, or pretending in any way or did you feel his/her reaction was completely open and sincere?

Seemed insincere, just putting on a front

Was helpful but seemed routine, uninvolved

Was helpful, really sincerely concerned and involved

Was sincere and open, but in a way that made me feel worse

SPOUSE Available Not available

Question: Were you able to talk with him/her about how you felt - did he/she seem to understand your feelings and situation?

Can't talk

Talked but didn't understand

Seemed to understand - could express all my feelings

Helped me to understand better - discovered new feelings

Question: Did he/she seem to reject you, or to not accept your feelings or to accept you and the way you felt, or even to challenge you to cope better?

Rejected me

Concerned but rejected my feelings

Accepted how I felt, gave me encouragement

Challenged me to face difficulties and overcome them

Question: Did he/she seem to be hiding how he/she felt, or pretending in any way or did you feel his/her reaction was completely open and sincere?

Seemed insincere, just putting on a front

Was helpful but seemed routine, uninvolved

Was helpful, really sincerely concerned and involved

Was sincere and open, but in a way that made me feel worse

CHILDREN Available Not available

Question: Were you able to talk with him/her about how you felt - did he/she seem to understand your feelings and situation?

Can't talk

Talked but didn't understand

Seemed to understand - could express all my feelings

Helped me to understand better - discovered new feelings

Question: Did he/she seem to reject you, or to not accept your feelings or to accept you and the way you felt, or even to challenge you to cope better?

Rejected me

Concerned but rejected my feelings

Accepted how I felt, gave me encouragement

Challenged me to face difficulties and overcome them

Question: Did he/she seem to be hiding how he/she felt, or pretending in any way or did you feel his/her reaction was completely open and sincere?

Seemed insincere, just putting on a front

Was helpful but seemed routine, uninvolved

Was helpful, really sincerely concerned and involved

Was sincere and open, but in a way that made me feel worse

N.B. Do not record children as helpful or unhelpful unless they have made some positive contribution of an interpersonal kind in either of these directions.

FRIENDS Available Not available

Question: Were you able to talk with him/her about how you felt - did he/she seem to understand your feelings and situation?

Can't talk

Talked but didn't understand

Seemed to understand - could express all my feelings

Helped me to understand better - discovered new feelings

Question: Did he/she seem to reject you, or to not accept your feelings or to accept you and the way you felt, or even to challenge you to cope better?

Rejected me

Concerned but rejected my feelings

Accepted how I felt, gave me encouragement

Challenged me to face difficulties and overcome them

Question: Did he/she seem to be hiding how he/she felt, or pretending in any way or did you feel his/her reaction was completely open and sincere?

Seemed insincere, just putting on a front

Was helpful but seemed routine, uninvolved

Was helpful, really sincerely concerned and involved

Was sincere and open, but in a way that made me feel worse

CLERGYMAN Available Not available

Question: Were you able to talk with him about how you felt - did he seem to understand your feelings and situation?

Can't talk

Talked but didn't understand

Seemed to understand - could express all my feelings

Helped me to understand better - discovered new feelings

DOCTOR or SOCIAL AGENCY (i.e. seen as direct or indirect consequence of the accident)

Question: Were you able to talk with him/her about how you felt - did he/she seem to understand your feelings and situation?

Can't talk

Talked but didn't understand

Seemed to understand - could express all my feelings

Helped me to understand better - discovered new feelings

Question: Did he/she seem to reject you, or to not accept your feelings or to accept you and the way you felt, or even to challenge you to cope better?

Rejected me

Concerned but rejected my feelings

Accepted how I felt, gave me encouragement

Challenged me to face difficulties and overcome them

Question: Did he/she seem to be hiding how he/she felt, or pretending in any way or did you feel his/her reaction was completely open and sincere?

Seemed insincere, just putting on a front

Was helpful but seemed routine, uninvolved

Was helpful, really sincerely concerned and involved

Was sincere and open, but in a way that made me feel worse

N.B. Check here if contact made with this particular agency the first time since the accident ..... If new contact, note any particular person(s) involved in referral.

OTHER RELATIVES Available Not available

Question: Were you able to talk with him/her about how you felt - did he/she seem to understand your feelings and situation?

Can't talk

Talked but didn't understand

Seemed to understand - could express all my feelings

Helped me to understand better - discovered new feelings

Question: Did he/she seem to reject you, or to not accept your feelings or to accept you and the way you felt, or even to challenge you to cope better?

Rejected me

Concerned but rejected my feelings

Accepted how I felt, gave me encouragement

Challenged me to face difficulties and overcome them

Question: Did he/she seem to be hiding how he/she felt, or pretending in any way or did you feel his/her reaction was completely open and sincere?

Seemed insincere, just putting on a front

Was helpful but seemed routine, uninvolved

Was helpful, really sincerely concerned and involved

Was sincere and open, but in a way that made me feel worse

BOSS Available Not available

Question: Were you able to talk with him about how you felt - did he seem to understand your feelings and situation?

Can't talk

Talked but didn't understand

Seemed to understand - could express all my feelings

Helped me to understand better - discovered new feelings

Question: Did he seem to reject you, or to not accept your feelings or to accept you and the way you felt, or even to challenge you to cope better?

Rejected me

Concerned, but rejected my feelings

Accepted how I felt, gave me encouragement

Challenged me to face difficulties and overcome them

Question: Did he seem to be hiding how he felt, or pretending in any way or did you feel his reaction was completely open and sincere?

Seemed insincere, just putting on a front

Was helpful but seemed routine uninvolved

Was helpful, really sincerely concerned and involved

Was sincere and open, but in a way that made me feel worse

If the respondent had any contact with these professions, then:

Question: Was talking to any persons listed helpful?

(a) G.P.

(b) Medical Specialist

(c) Social worker, welfare officer, health visitor

(d) Psychologist

(e) Police

(f) Lawyer

(g) District Nurse

Provision of practical needs

Question: Was there any practical help you were given you haven't mentioned? (e.g. money, transport etc.)

Question: Present assistance, if any?

(a) Not needed

(b) Needed and getting

(c) Needed and not getting

Question: Who has been the most helpful person(s) during the period since your accident?

Question: Do you feel that any person(s) have let you down since your accident?

Question: Will you be receiving any compensation?

Life crisis occurring during the year preceding the accident

General areas:

(1) Personal and social

(a) physical health, e.g. use of tranquillizers

(b) mental health, e.g. depression

(c) social role performance

(2) Work

(3) Marital

(4) Disciplinary

Stress

(Respondent is asked to indicate "life-events" he has experienced in the twelve months preceding the accident.)

Moving house

Change of job

Bereavement

Promotion

Birth of child

Illness of family member

Car accident

Child starting school

Loss of pet

Separation from loved ones

Close friend moving away

Marriage of family member

Severe job dissatisfaction

Family member commencing work

Serious illness of self

Family member stopping work

Severe financial difficulties

Nervous disorder in family

Conflict with family

Heavy drinking by family member

Upset with children

Marital conflict

Falling out with close friend

Legal trouble

Child leaving home

Miscarriage in family member

Marriage of self

Failure in exams

Sudden financial gain

Broken romance

Loss of job

Retirement

Falling out with family

Natural disaster

Heavy gambling by family member

Broken marriage

Falling out with family due to marriage

APPENDIX C

LANGNER "22 ITEM" SCALE

APPENDIX C

LANGNER "22 ITEM" SCALE

For the following statements, please circle the answer which best applies to you.

1.	Do you feel weak all over much of the time?	A. Yes B. No
2.	Have you had periods of days, weeks or months when you couldn't take care of things because you couldn't "get going"?	A. Yes B. No
3.	In general, would you say that most of the time you are in very low, low, good or high spirits?	A. Very low B. Low C. Good D. High
4.	Do you suddenly feel hot all over every so often?	A. Yes B. No
5.	Have you ever been bothered by your heart beating hard? Would you say: often, sometimes, or never?	A. Often B. Sometimes C. Never
6.	Would you say your appetite is poor, fair, good or too good?	A. Poor B. Fair C. Good D. Too good

7.	Do you have periods of such great restlessness that you cannot sit long in a chair?	A. Yes B. No
8.	Are you the worrying type?	A. Yes B. No
9.	Have you ever been bothered by shortness of breath when you were not exercising or working hard? Would you say: often, sometimes or never?	A. Often B. Sometimes C. Never
10.	Are you ever bothered by nervousness or are you irritable, fidgety or tense? Would you say: often, sometimes or never?	A. Often B. Sometimes C. Never
11.	Have you ever had any fainting spells (lost consciousness)? Would you say: never, a few times, or more than a few times?	A. More than a few times B. A few times C. Never
12.	Do you ever have any trouble in getting to sleep or staying asleep? Would you say: often, sometimes or never?	A. Often B. Sometimes C. Never
13.	Are you bothered by acid stomach several times a week?	A. Yes B. No
14.	Does your memory seem to be all right?	A. No B. Yes
15.	Have you ever been bothered by 'cold sweats'? Would you say: often, somteimtes, or never?	A. Often B. Sometimes C. Never

16. Do your hands ever tremble enough to bother you? Would you say: often, sometimes or never?
   A. Often
   B. Sometimes
   C. Never

17. Do you have a fullness or clogging in your head much of the time?
   A. Yes
   B. No

18. Do you have personal worries that get you down physically?
   A. Yes
   B. No

19. Do you feel somewhat alone or apart even among friends?
   A. Yes
   B. No

20. Do you feel that things never turn out for you the way you want them to?
   A. Yes
   B. No

21. Are you ever troubled with headaches or pains in the head? Would you say: often, sometimes or never?
   A. Often
   B. Sometimes
   C. Never

22. Can you sometimes not help wondering if anything is worthwhile anymore?
   A. Yes
   B. No

Thank you.

APPENDIX D

BRADBURN - THE AFFECT BALANCE SCALE

APPENDIX D

BRADBURN - THE AFFECT BALANCE SCALE

We are interested in the way people are feeling these days. The following list describes some of the ways people feel at different times. Please indicate how often you felt each way during the last week.

How Often Last Week Did You Feel		(Circle One Number for each Feeling)			
		Not at All	Once	Several Times	Often
A.	On top of the World?	0	1	2	3
B.	Very lonely or remote from other people?	0	1	2	3
C.	Particularly excited or interested in something?	0	1	2	3
D.	Depressed or very unhappy?	0	1	2	3
E.	Pleased about having accomplished something?	0	1	2	3
F.	Bored?	0	1	2	3
G.	Proud because someone complimented you on something you had done?	0	1	2	3
H.	So restless you couldn't sit long in a chair?	0	1	2	3
I.	Upset because someone criticised you?	0	1	2	3
J.	That things were going your way?	0	1	2	3

APPENDIX E

LANGSLEY PERSONAL FUNCTIONING SCALE

SYMPTOMS CHECK-LIST

APPENDIX E

LANGSLEY PERSONAL FUNCTIONING SCALE

SYMPTOMS CHECK-LIST

The following statements are descriptions of how people feel.
Check how well they characterize you.

5 = very often; 4 = often; 3 = sometimes; 2 = rarely; 1 = never.

During the past 3 months:

1.	How often have you felt that people are pushing you around?	___5 ___4 ___3 ___2 ___1
2.	How often have you pushed other people around?	___5 ___4 ___3 ___2 ___1
3.	How often have you been troubled by debts?	___5 ___4 ___3 ___2 ___1
4.	How often have you forgotten about important things?	___5 ___4 ___3 ___2 ___1
5.	How often have you done things on sudden impulse?	___5 ___4 ___3 ___2 ___1
6.	How often have you flared up in anger?	___5 ___4 ___3 ___2 ___1
7.	How often have you argued with family members?	___5 ___4 ___3 ___2 ___1
8.	How often have you been troubled by thoughts about hurting someone?	___5 ___4 ___3 ___2 ___1
9.	How often are your feelings hurt?	___5 ___4 ___3 ___2 ___1
10.	How often do people misunderstand you/	___5 ___4 ___3 ___2 ___1
11.	How often have you heard voices?	___5 ___4 ___3 ___2 ___1
12.	How often have you felt unhappy and depressed?	___5 ___4 ___3 ___2 ___1
13.	How often have you been troubled by suicidal thoughts?	___5 ___4 ___3 ___2 ___1

14. How often do disturbing thoughts come into your mind? ____5 ____4 ____3 ____2 ____1

15. How often had you been having trouble sleeping? ____5 ____4 ____3 ____2 ____1

16. How often have you been nervous and jumpy? ____5 ____4 ____3 ____2 ____1

17. How often have you done anything that looked crazy to other people? ____5 ____4 ____3 ____2 ____1

APPENDIX F

LANGSLEY PERSONAL FUNCTIONING SCALE

JOB PERFORMANCE

APPENDIX F

LANGSLEY PERSONAL FUNCTIONING SCALE

JOB PERFORMANCE

Task Performance: JOB

The following statements are descriptions of people's work habits. To what extent or in what manner do they characterize you?

1. How many different jobs have you held during the past 3 months? _____

2. How many promotions or raises did you receive during the past 3 months? _____

3. How much do you earn now compared to 3 months ago?
   More: _____
   Same: _____
   Less: _____

For the following questions, check the space most appropriate to your answer.

5 = very often; 4 = often; 3 = sometimes; 2 = rarely; 1 = never.

4. How often have you gotten along poorly with your fellow workers? ____5 ____4 ____3 ____2 ____1

5. How often has your boss complained about you? ____5 ____4 ____3 ____2 ____1

6. How often has the family complained about your attitude toward work? ____5 ____4 ____3 ____2 ____1

7. If you are not working, how often have you looked for a job? ____5 ____4 ____3 ____2 ____1

8. How often have you been late getting to work? ____5 ____4 ____3 ____2 ____1

9. How often have you been absent from work? ____5 ____4 ____3 ____2 ____1

APPENDIX G

MADDISON - HEALTH QUESTIONNAIRE

APPENDIX G

MADDISON - HEALTH QUESTIONNAIRE

HEALTH QUESTIONNAIRE

The information which you provide in answering the following questions will be completely confidential, and will be known only to the professional people working on this research project. You do not need to put your name on any of these pages.

YOUR HEALTH

We are interested to learn as much as we can about your state of health since your accident. In particular, we wish to know whether you have developed any new complaints or whether any old complaints have been bothering you more than usual during this time. On the next page you will see a list of complaints and symptoms, and we would like you to underline any item in this list ONLY IF

_____ this is a new complaint, which you have never had before which has caused you considerable concern since your accident;

OR IF

_____ this is an old complaint, but it has been much more troublesome since your accident.

You will see from the above statements that we DO NOT want you to underline any item if it refers only to a minor complaint which did not last very long and did not concern you very much, OR if the complaint is an old one which has not bothered you any more than usual since your accident.

Complaints and Symptoms

(Remember to underline an item ONLY IF it is a new complaint which has caused you considerable concern since the accident, OR IF it is an old complaint which has been much more troublesome since the accident.)

1. Constipation
2. Sleeplessness
3. Asthma
4. Pains in the back
5. General nervousness
6. Swollen or painful joints
7. High blood pressure
8. Difficulty in swallowing
9. Persistent fears
10. Marked loss of hair
11. Cold sores
12. Migraine
13. Headaches
14. Severe itching
15. Fainting spells
16. Palpitations
17. Shortness of breath
18. Stomach ulcers
19. Nightmares
20. Hay fever
21. Pains in the face
22. Frequency of urination
23. Convulsions (fits)
24. Heart failure (dropsy)
25. Hives
26. Indigestion
27. Diarrhoea (frequent loose bowel movements)
28. Rheumatism
29. Repeated peculiar thoughts
30. Pains in the chest
31. Trembling
32. Excessive tiredness
33. Twitching
34. Dizziness
35. Blurred eyesight
36. Diabetes (increased blood sugar)
37. Skin rashes
38. Excessive appetite
39. Goitre (swelling in the neck)
40. Feelings of panic
41. Colitis
42. Vomiting
43. Excessive sweating
44. Fear of nervous breakdown
45. General aching
46. Poor appetite
47. Frequent infections
48. Cancerous growth

Before you leave this page, *please look again* at any items you have underlined, and mark the item with a capital D if since the accident you saw a doctor about this complaint *for the first time*.

Finally, *look once more* at any underlined items, and mark the item with a capital H if since the accident you had to spend time in hospital because of this complaint *for the first time*.

☐ Please place an X here if you have read this page and found nothing that applies to you.

SOME FINAL QUESTIONS ABOUT YOUR HEALTH

The next 3 pages contain statements which can be completed in several possible ways. Please read carefully the first part of each statement, and then look at each of the endings which we have suggested and decide which one is most true for you. Mark with a cross (X) the ending which you select.

1. Since my accident my weight:

   _____ has increased enough to concern me.
   _____ has not changed enough to concern me.
   _____ has decreased enough to concern me.

2. (DO NOT answer this question if you have always been and still are a non-smoker.)
   Since my accident, I have been smoking:

   _____ much less than before
   _____ a little less than before
   _____ about the same amount as before
   _____ a little more than before
   _____ much more than before

3. Before my accident I had depressed moods:

   _____ hardly ever
   _____ from time to time, but never enough to concern seriously
   _____ so frequent or so severe that I was seriously concerned
   _____ severe enough for me to see a doctor. (excluding anyone you may have seen in connection with the university)
   _____ severe enough for me to be admitted to hospital

4. After the first 2 or 3 months following my accident my mood has been:

   _____ about the same as before my accident
   _____ depressed to an extent I thought was reasonable under the circumstances
   _____ more depressed than I thought was reasonable
   _____ depressed enough to concern me
   _____ bad enough for me to see a doctor about it (excluding anyone you may have seen in connection with the university)
   _____ bad enough for me to be admitted to hospital

5. Before my accident I took sleeping pills, tranquillizers or nerve pills:

_____ not at all
_____ occasionally
_____ regularly, but not enough to concern me
_____ so much that I was concerned about it

6. Since my accident I have taken sleeping pills, tranquillizers or nerve pills:

_____ not at all
_____ less than before
_____ about the same as before
_____ more than before, but not enough to concern me
_____ so much that I have been concerned about it

7. Before my accident I drank alcoholic beverages:

_____ not at all
_____ occasionally
_____ fairly regularly, but not enough to concern me
_____ so heavily that I was concerned about it
_____ so heavily that I needed special treatment

8. Since my accident I have drunk alcoholic beverages:

_____ not at all
_____ less than before
_____ about the same as before
_____ more than before, but not enough to concern me
_____ so heavily that I have been concerned about it
_____ so heavily that I have needed special treatment

9. Since my accident my ability to do my work has been:

_____ much better than before
_____ a little better than before
_____ the same as before
_____ a little less than before
_____ much less than before

Are there any general comments you would like to make about your health since your accident?

Would you like to make any comments about the questions we have asked you? Was there anything you did not understand?

We are grateful for your co-operation. Thank you.

APPENDIX H

SOCIAL WORK RECORD FOR EACH CRISIS INTERVENTION SESSION

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SOCIAL WORK RECORD FOR EACH CRISIS INTERVENTION SESSION

RECORD

NAME: _____ PLACE: _____ DATE: _____

NO. OF PARTICIPANTS: _____ (relation, sex, age, occupation)

DURATION:

INTERVENTION AREAS

"Record along the lines of:
1. What was ventilated and reviewed?
2. Was it resolved?
3. Were action possibilities defined?
4. What action should follow? "

(1) SELF

(II) SOCIAL (social role performance)

(III) FINANCES

(IV) WORK

(V) MARITAL, FAMILY

(VI) AGENCIES

(VII) MEDICAL

(VIII) OTHER