

A CONTROLLED STUDY OF  
LIFE EVENTS, SOCIAL SUPPORT,  
AND RELIGIOUS AFFINITY  
AMONG DEPRESSED INDIAN  
SOUTH AFRICANS.

BY

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## ABSTRACT

Cross cultural research on the association between Life Events, Social Support, Religious Affinity, and Depression is limited. In view of the clinical impression that depression is becoming more prevalent in the Indian South African population, a community which is culturally distinct from Anglo-American populations, and the fact that there are no studies on these three variables in the Indian population, a study was planned to investigate the association between Life Events, Social Support, Religious Affinity, and Depression in the Indian South African population.

The research design involved the analysis of data on Life Events, Social Support, and Religious Affinity. This data was obtained from a sample of 15 female depressives (which formed the Experimental group) and 15 matched community controls (henceforth designated the Control group).

Informed consent was obtained from both sample groups prior to participation in the study. A 50 item Social Readjustment Rating Questionnaire - Chohan's Adaptation (SRRQ-CA), a 4 item Social Support Scale, and a 4 item Religious Affinity Scale was administered to both groups to assess Life Events, Social Support, and Religious Affinity respectively.

A t-Test analysis of the scores obtained produced the following major findings:

1. The Experimental group experienced a significantly higher degree of life stress than the Control group.
2. The Experimental group experienced a significantly greater number of life events than the Control group.
3. The Experimental group experienced lower social support than the Control group. This result was not statistically significant.
4. The Experimental group reported less religious affinity than the Control group. This result was not statistically significant.

These findings lend themselves to further research in this field and have significant therapeutic implications.

## PREFACE

This study represents original work by the author and has not been submitted in any form to another University. Where use was made of the work of other authors it has been duly acknowledged in the text.

The experimental work described in this dissertation was carried out in the Department of Psychiatry, University of Natal, and at the King George V Hospital and Northdale Hospital from July 1986 to October 1986, under the supervision of Dr. A.J.Lasich and co-supervision of Mr. L.R.Naidoo.

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## CHAPTER 1

## INTRODUCTION

1.1 GENERAL EVALUATION OF THE CRITICAL VARIABLES: LIFE EVENTS,  
SOCIAL SUPPORT, AND RELIGIOUS AFFINITY

Affective disorders are the most common psychiatric disorders and their frequency in clinical and community populations has been the subject of considerable research (Hirschfeld and Cross, 1982). In an extensive review of the literature, Boyd and Weissman (1981) estimated a lifetime prevalence of 17% to 20% and a one year prevalence of 5% to 8%. In the writer's experience, figures for Indian South Africans approximate the above although no epidemiological study has been done in this population. However, from the increasing rates of suicide and parasuicide and since in the majority of cases depression is an associative variable (Gangat, 1984), it can be assumed that clinically recognisable depression is on the increase in the Indian community.

A literature survey covering a span of two decades reflects an increasing wealth of research on depression and more specifically on the critical variables related to depression, namely, Life Events (Holmes and Rahe, 1967; Paykel et al, 1969; Jacobs et al, 1974; Ilfield, 1977; Patrick et al, 1978) and Social Support (Henderson, 1977; Brown and Harris, 1978; Roy, 1978; Solomon and Bromet, 1982; Campbell et al, 1983).

The general literature on life events shows a strong link with psychopathology, and depression in particular. Life events have been classified by investigators as being of a positive nature (marriage; job promotion) or of a negative nature (loss of job; divorce). They have also been described as desirable/undesirable and as "exit" or "threatening" events (Hirschfeld and Cross, 1982). However, whatever the classification or description used, the nature of these events is such that they necessitate an adjustment in the ongoing pattern of the individual's life (Holmes and Rahe, 1967). The controversy surrounding life event studies is one of establishing causality. To demonstrate a causal relationship between life events and depression, the life events must be shown to antecede the onset of depression and be independent of the disorder. This was clearly demonstrated by Paykel et al (1969) who

concluded that depressed patients reported almost three times as many events in the preceding six months than did a matched sample of general population controls.

Regarding social support, the individual's social network of family and friends can be of extreme importance during periods of stress (Henderson, 1977). It can relieve him of part of the burden by providing emotional and material support in these times. The social and emotional resources people give to each other have been regarded as a "fund of sociability", the elements of which are intimacy, integration in a network of people with shared concerns, the opportunity to grow in oneself through relationships with others, a reassurance of a sense of worth, and the guidance and support the network offers (Mangen, 1982). Feelings of a lack of attachment and a feeling that one is receiving insufficient caring and attention have been linked with the development of neurotic depression, suicide attempts and anorexia nervosa (Henderson, 1974). From a review of the literature, social support may exert a primary effect in that its absence is itself a source of stress or it may buffer the individual against life event stress.

A third important variable, religious affinity (also termed religiosity), has been sadly neglected in the general literature (Larson et al, 1986). Contemporary observations indicate that religion still plays an important role in the lives of majority of people. Moreover, religion provides the basis for codes and values that sustains the individual's way of life (Tilak, 1975). However, the literature survey bears evidence that research has not focussed on this important concept (Larson et al, 1986).

While this important clinical entity has been extensively researched, cross-cultural comparisons are few in number and a recent Saudi Arabian study by Chaleby (1986) highlights this issue. The dilemma facing the clinician treating the Indian South African is that he is guided by foreign literature on this important disorder.

## 1.2 AN EVALUATION OF THE CRITICAL VARIABLES IN THE INDIAN POPULATION OF SOUTH AFRICA

Three variables considered to have an important bearing on the incidence of depression in the Indian South African population are:

- Life Events
- Social Support
- Religious Affinity

### 1.2.1 Life Events

While life events have been established as an important associative variable in the aetiology of depression, it has been suggested that the nature of life events differ for different populations (Chaleby, 1986). The Indian South African, although approaching fourth generation Indians living in South Africa, is distinctly Indian in tradition and culture. The social orientation of the Indian is towards family and close friends as opposed to the emphasis on individuality for people of western culture. Acquisitiveness, power, and control issues are highly valued in the latter community and this contrasts sharply with the theme of harmonising with society which is prevalent in the Indian community. Here, community acceptance plays a vital role in major decision making. Boundaries between generations and the sexes are highly delineated and respected. As a result of these inherent differences, a unique set of life events may pertain to this population.

### 1.2.2 Social Support

The kinship system of the Indian community has its roots in its country of birth - India. The vernacular terms "kutum", "kudumbom", and "kuduma" denote an extended pattern of relationships traced through a common patriarchal lineage. The average extended Indian family consists of 50 - 100 family members and the average nuclear family consists of 6.1 - 8.8 members. This kinship system prevails in at least 50% of the Indian community (Jithoo, 1968). However, rapid population growth and the urban milieu have proved inconducive to the extended family and have increased the tendency towards the development of the nuclear family unit (Jithoo, 1975). This transitional state may be related to a weakening of social

support in this community. Clinical impressions (Cheetham et al, 1983) suggest that conflicts generated by deviation from cultural norms and subsequent community rejection, constitute a major precipitating factor in a number of parasuicidal acts. Hence lack of social support may be a significant variable for the Indian community in the aetiology of depression.

### 1.2.3 Religious Affinity

A third variable that may have an associative link with depression in the Indian community is religiosity. The Indian South African is considered to be deeply religious (Tilak, 1975) and has retained religious beliefs and ceremonies. Holy days, religious rituals and festive occasions have great significance and are strictly adhered to by the majority of the Indian population. With the development of new suburban townships, there has been a rapid erection of new houses of worship (Tilak, 1975). However, Cheetham et al (1983) in their study reported an interesting finding in that the Asian Christian group represents a religiously acculturated group which may still be torn between the traditional Asian social values and beliefs and those of the westerners. It has been reported that the proportion of Asian Christian parasuicides is much larger than their population ratio (Gangat, 1984). A possible reason for this might be that, since Christianity is a newly adopted religion, the Christian converts lack firm religious convictions. It may be that in the populations following an established religion, their religious practices, by fulfilling certain significant needs, may act as a buffer against emotional stress.

It is clear from the above comments that the critical variables, Life Events, Social Support and Religious Affinity, as they pertain to the Indian South African, are significant.

## 1.3 MOTIVATION

A study of these variables, Life Events, Social Support and Religious Affinity in the Indian depressive would be of relevance to the following:

1. To provide additional data to our informational system regarding the

Indian South African.

2. To stimulate cross-cultural research.
3. To provide a firm foundation which can serve as a basis for therapeutic guidelines in order to assist therapists in the management of Indian patients.

In view of the above motivating factors, a study of the relationship between Life Events, Social Support, Religious Affinity, and Depression was planned for the Indian South African population.

#### 1.4 AIM

To investigate the relationship between:

1. Life Events and Depression.
2. Social Support and Depression.
3. Religious Affinity and Depression.

#### 1.5 HYPOTHESES

The following hypotheses will be tested:

1. Experimental group subjects differ significantly from matched Controls in terms of Life Event stress.
2. Experimental group subjects differ significantly from matched Controls in terms of number of Life Events experienced.
3. Experimental group subjects differ significantly from matched Controls in terms of Social Support.
4. Experimental group subjects differ significantly from matched Controls in terms of Religious Affinity.

## CHAPTER 2

## REVIEW OF RELATED LITERATURE

## 2.1 INTRODUCTION

"The vulnerability of an individual for life events is due to the outcome of the interaction between biological, psychological and social factors which characterise him at a given time" (Perris, 1984).

This statement can be illustrated by the following diagram:

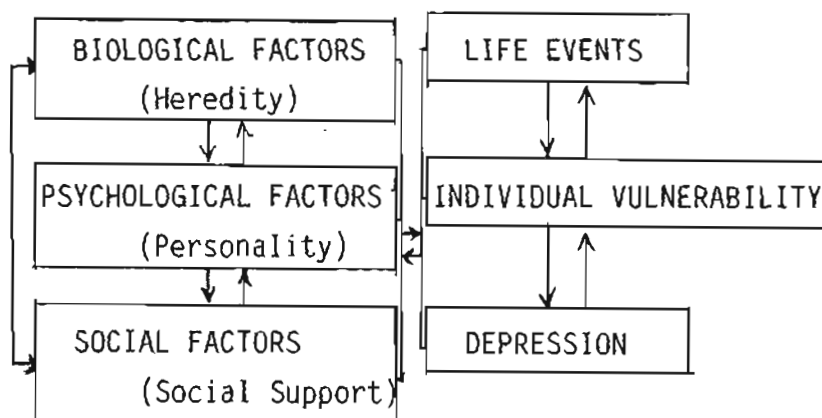


Fig. 1: Flow Diagram Illustrating the Interaction of Bio-Psycho-Social Factors with Life Events and Individual Vulnerability in Causing Depression.

The relationship between these various factors have been studied extensively by such eminent authors as Holmes and Rahe (1967); Brown and Harris (1978); Paykel (1978).

In this chapter, literature relevant to the three variables under discussion, namely, Life Events, Social Support, and Religious Affinity will be focussed upon.

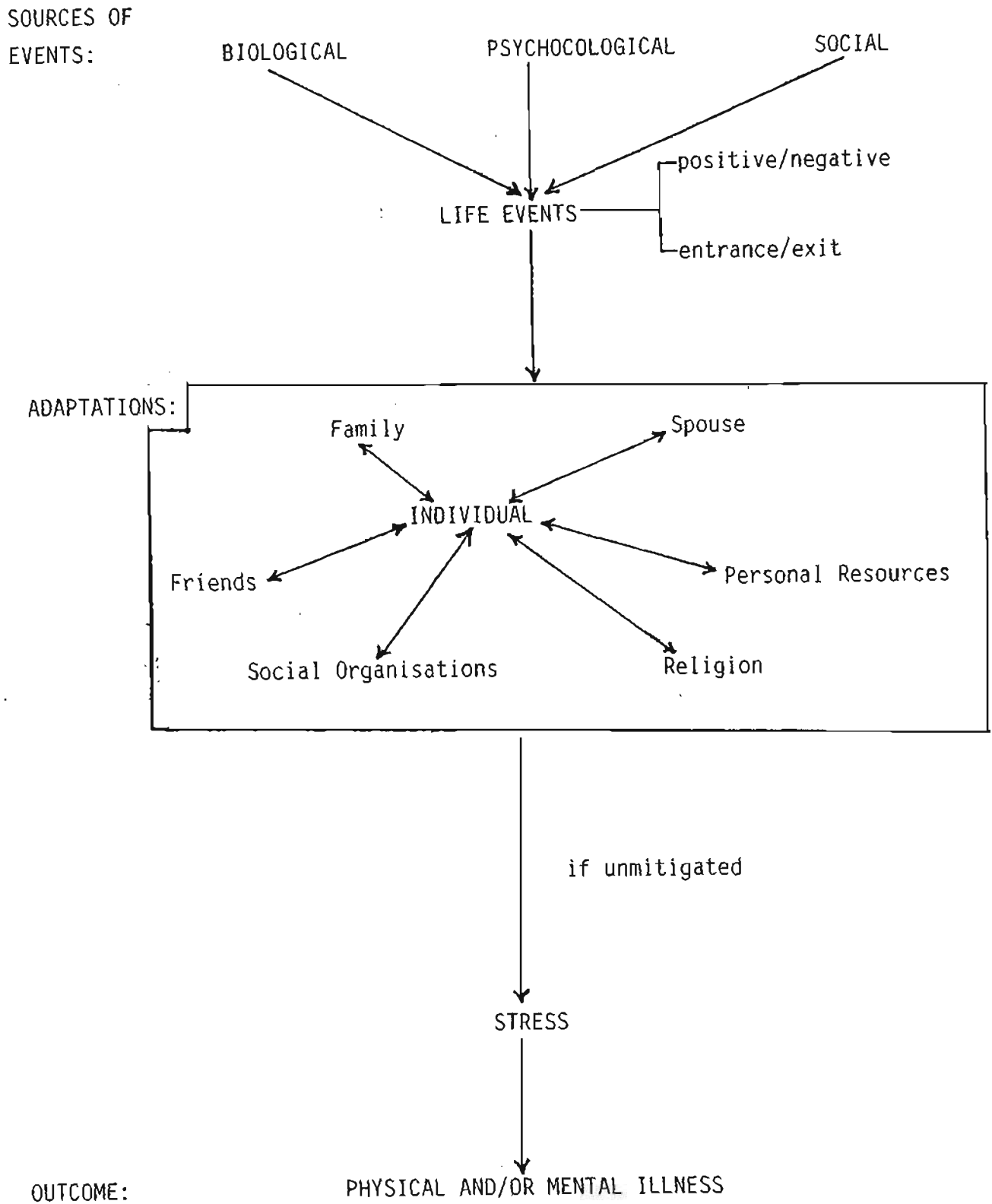


Fig. 2: Life Events: Sources, Adaptations, and Outcome



## 2.2 LIFE EVENTS

### 2.2.1 Introduction

The relationship between social, psychological, and other environmental factors, and illness, has been of research interest to medical and social scientists for decades. This interest has accelerated in recent years as investigators from a wide range of disciplines have attempted to identify the processes by which life events, which are conceptualised as stressors, act as precursors to physical illness (Rahe et al, 1974) and/or psychiatric disorders (Brown, 1974); Paykel, 1974). Although there have been almost as many definitions of stress as there have been researchers, there is a common thread running through these definitions. Stress is generally conceptualised as the altered state of an organism produced by agents in the psychological, social, cultural, and physical environments. It is assumed that this altered state, when unmitigated, produces deleterious effects on the physical and/or mental well-being of affected individuals (Warheit, 1979). (Fig. 2)

### 2.2.2 Historical Background

Among medical scientists, the early work of Cannon (1928) was very influential. His pioneering efforts to detail the relationship between emotional states such as fear, anger, pain, and anxiety, and changes in physiological functions, provided a model for early scientific inquiry. In psychiatry, Adolf Meyer (1951) advocated the use of a life chart as a tool in medical diagnosis. Events included changes in habitat; school entrance; graduations or failures; change of various jobs; births and deaths. Meyer said that life events might play an important role in the aetiology of a disorder. They need not be bizarre or catastrophic but even the most mundane and routine life events were potential contributors to the development of pathological conditions. Other important early contributors in the field were Wolff et al. (1950); Selye (1956); and Hinkle et al. (1958).

In 1964 Rahe and colleagues, in investigating the proposition that many diseases have their onset in a setting of mounting frequency of life events, devised the Schedule of Recent Experiences (SRE), a self-administered questionnaire which documented both demographic data and

data related to social readjustment. Rahe et al. concluded that life events in the years just prior to the onset of illness were best correlated with illness onset. These events were felt to be contributory and necessary but not sufficient factors related to disease (Rahe et al, 1964). The life events included family constellation, marriage, occupation, economics, residence, recreation, health.

Holmes and Rahe (1967) proceeded to construct the Social Readjustment Rating Scale (SRRS) which has subsequently formed the cornerstone of research in the field of life events and illness. Other researchers in this field have devised questionnaires on life events which have varied the number of items used (Paykel et al, 1971; Myers et al, 1972; Chalmers, 1981), and the content (Rahe et al, 1967). However, the common theme of all life events is that they are indicative of or require some change in the ongoing life pattern of the individual concerned.

### 2.2.3 Conceptualisation of Life Events

In order for research to achieve its aims, the variables under investigation need to be clearly defined. Failure to do so results in confusion and difficulties with continued research in the particular field of study.

There are many definitions of life events, all linked by a common theme. Holmes and Rahe (1967) defined life events as those "whose advent is either indicative of or requires a significant change in the ongoing life pattern of the individual".

Brown and Birley (1968) conceptualised life events as those "which on common sense grounds are likely to produce emotional disturbance in many people".

Myers et al. (1972) defined life events as "experiences involving role transformations, changes in status or environment, or impositions of pain".

Pearlin and Lieberman (1979) divided life events into two broad classes:

1. Normative events that are expected and regular in occurrence e.g.

going to school, first job, getting married, having children, retirement, and death of close family members.

2. Non-normative events that are frequently crises which are not easily predictable although they are of common occurrence e.g. divorce, miscarriage, loss of job.

Paykel (1974) classified life events according to the changes that these life events involve in the social environment of the individual.

Entrance events are those which involve introduction of a new person into the social field (marriage; birth) whereas exit events are those which involve departure from the social field (divorce; death).

Life Events can also be conceptualised as positive/desirable (job promotion), negative/undesirable (loss of job) or ambiguous (change in residence). However, Rahe (1968) emphasised that change rather than valence is of primary concern. It does not matter whether such life events are viewed as desirable or undesirable by the person involved, the magnitude of life change is the critical determinant. On the other hand, Hirschfeld and Cross (1982) argued that specific types of events, rather than life change in general, were implicated in the onset of depression. When events were broken down into categories, it was found that the onset of depression was related to distinct types of life events. Specifically depressives experienced significantly more "markedly threatening" events, more "exit" events, and more "undesirable" events than did general population controls, while "entrance" and "desirable" events were represented approximately equally in both groups.

#### 2.2.4 Empirical Evidence Relating Life Events and Depression

A number of criticisms have been levelled against life event studies. Hudgens (1974), after surveying the problems in the interpretation of results, listed the following methodological requirements of a valid study:

1. The time of onset of an illness must be established within a reasonable time span.
2. The time of occurrence of life events must be established.
3. Life event reports should be verified by informants such as other family members.

4. There should be a quantification of the importance of each type of event for each patient.
5. Suitable control groups must be selected.
6. Life events which are possible consequences of the illness in question, should be excluded from consideration as possible precipitants of the illness.

A review of life event studies bears evidence that these prerequisites are often difficult to establish.

Paykel et al. (1969) in a retrospective study interviewed 185 depressed patients from out-patient clinics, day hospitals and in-patient units. The 185 community controls were matched for sex, age, marital status, race and social class. The two groups were assessed on 33 life events. The major findings were that depressed patients experienced three times as many events as the controls in the six months preceding the onset of depression. The authors also investigated sub-classification of events and found that the following "exit" and "undesirable" events were significantly more frequent among depressives:

- Marital arguments
- Marital separations
- Starting a new type of work
- Change in work conditions
- Serious personal illness
- Death of immediate family member
- Serious illness of family member
- Family member leaving home.

Brown et al. (1973) in a retrospective study compared 114 hospitalised depressed female patients with a random selection of community women, with respect to the occurrence of life events in the preceding year. Events were identified in interviews conducted at three week intervals with controls and with patients and their respective relatives. During the three weeks prior to onset of the disorder, 51% of the patients compared to 16% of the controls had experienced at least one event. However, outside of this three-week time period, rates of events were equal for the two groups. When severity was assessed, markedly threatening events were experienced during the entire year by 42% of depressed patients as

compared to 9% of the control group.

Paykel et al. (1975) retrospectively compared 53 patients admitted for emergency treatment after a suicide attempt, with a group of depressed patients who had not made a suicide attempt, and with general population controls. The non-suicidal depressed patients reported three times as many events as the control group, and specifically reported two events with greater frequency:

- Serious arguments with spouse
- Starting new type of work.

The suicide attempt group reported a greater frequency of events than did the depressives and four times as many events as did the controls, with greater frequency of the following events:

- Serious arguments with spouse
- New person in the home
- Serious illness of close family member
- Serious personal physical illness
- Court appearance for offence.

There was a peaking of events in the month before the suicide attempt.

Life events can also be related to depressive relapse as was shown by Paykel and Tanner (1976). Depressed patients who had relapsed, reported more events in the three months before relapse than a matched group of depressives who did not relapse. Relapsers also experienced more undesirable events.

Cadoret et al. (1972) provided a weaker link than the above studies and was criticised on the ground that the temporal association of events and depressive onset did not seem to reflect a causal relationship and that, after a careful analysis, events often followed the onset of symptoms.

Hudgens et al. (1967) concluded that events did not seem to bring on a disorder, although they could exacerbate a depression already in progress. However, the study drew its control group from hospitalised medical patients, a group known to experience a high incidence of stress events.

Hence the use of medical controls may have been a factor in reducing statistical significance in this study.

In summary, six major studies on the role of life events in the genesis of affective disorder have not produced entirely consistent results. Three studies (Paykel et al, 1969; Brown et al, 1973; Paykel et al, 1975) demonstrated that depressed patients had an increased incidence of life events in comparison with control samples; one study (Paykel and Tanner, 1976) demonstrated that patients experiencing a depressive relapse after treatment, reported more events prior to relapse than did their non-relapsing counterparts. All of these four studies were interpreted by their authors as supporting a causal relationship between life events and depression. Two further studies presented a dissenting viewpoint (Hudgens et al, 1967; Cadoret et al, 1972). The above findings highlight two important issues regarding life event studies:

1. Whether depressives do experience an excess of life events as compared to the general population.
2. Whether the excess life events reflect a causal relationship to the onset of depression.

Lloyd (1980) in a review of life event studies concluded that depressives experienced significantly more events than control groups. Lloyd stated that studies not finding such an increase differ in important methodological ways that could account for the discrepant results, namely:

1. The type of comparison group selected.
2. The type of events included for the study.
3. The time period examined.

Hudgens et al. (1967) used medical controls and did not use a standardised life events list. Cadoret et al. (1972) excluded important life events and the time period was not specified.

The issue of establishing causality is much more problematic (Tennant et al, 1981). Although the majority of studies have demonstrated an association between life events and depression, it cannot be assumed that this relationship is a causal one. The obvious limitation of the studies reviewed is that they involve no experimental manipulations, and thus

could reflect a correlational rather than a causal relationship.

A possible explanation for the difficulty in establishing causality may lie in the use of retrospective studies which are hampered by the following disadvantages:

1. The informant may have inadequate information about, or recall of, past events.
2. Recall may be biased. It could be argued that depressed patients do not actually experience more events but simply recall more of them, perhaps because they are seeking an explanation for their disorder, thus shedding doubt on causal inferences.
3. Findings are dependent on the appropriateness of selected controls. The use of medical controls in life event studies is not appropriate since it may obscure the high incidence of events among depressives.

A second possible difficulty in establishing causality is introduced when one considers the possibility that events could have been the result of, rather than the cause of, the depressive disorder. Perhaps depressed patients by virtue of their disorder are actually responsible for the occurrence of many of their reported events. Symptoms such as fatigue, poor concentration, and loss of interest, could lead to decreased work performance and hence loss of job. Even though close attention is paid to onset of only those events that occurred before symptom onset, it is possible that the symptoms of the depressive disorder are insidious and antecede the events. Hence the life events - illness model is beset with the problem of establishing causality.

Since ethical considerations rule out the possibility of experimental manipulation of events in humans and the resultant ability to make causal inferences, it is mandatory to look to other means. One possibility is the relevance of animal studies although it is difficult to generalise from animal studies to humans. Another avenue is the use of prospective studies. This type of study could strengthen a causal interpretation by elimination of biased recall, since in such studies the likelihood that altered mood influences either the occurrence of, or the reporting of life events is largely excluded. Prospective studies could also help elucidate temporal relationships because events must precede symptoms to be consistent with causal interpretations. One potential limitation of such

studies is that the time interval between the initial assessment of life events and subsequent follow up, when mental state is assessed, is unduly long. Although some have argued that subjects are vulnerable to depression for some considerable time after a stressful event, most clinicians believe that the depressive response is provoked most commonly in the immediate aftermath of the event.

Tennant (1983) focussed on 8 published controlled prospective studies in which life events were measured prior to the onset of psychological morbidity. In order to draw reasonable conclusions, Tennant, in his review, divided the prospective studies as follows:

- a) Prospective studies with a delayed follow-up period of six months or more.
- b) Prospective studies which incorporated briefer follow-up periods of less than six months.

The conclusion reached was that prospective studies overall did not seem to show that life events have any substantial causal role in neurotic illness or depression. Tennant concluded by stating that the thrust of life stress research should continue, with emphasis on prospective studies, using more sensitive measures of stress, and with appropriate short follow-up periods.

#### 2.2.5 The Comparative Role of Life Events as Precipitants in Other Conditions

From the preceding discussion, there is support for the contention that life events are associated with depression with greater frequency as compared to controls. Investigators have extended the concept of life events to other disorders to evaluate whether a similar association exists.

Beck and Worthen (1972) compared life situations immediately before admission for 21 neurotic patients, 15 schizophrenic patients, and 14 patients with mixed diagnoses. Clearly, precipitating factors, especially separations, were found in about 95% of depressives, 71% of mixed cases, and 53% of schizophrenic cases. Precipitating events occurred most commonly within three weeks prior to hospitalisation.



Jacobs et al. (1974) compared 50 depressives with matched first-admission schizophrenics. Depressives reported 50% more events in the six months prior to the onset of the disorder. A greater percentage of the depressives reported at least one "undesirable" event and at least one "exit" event.

Donovan et al. (1975) compared a group of hospitalised schizophrenics with a group of non-schizophrenic patients consisting of neurotic depressives, and those diagnosed as having mixed neurosis, character disorders, and situational reactions. The non-schizophrenic group clearly experienced precipitating events and these involved interpersonal or narcissistic loss.

Paykel (1978) estimated that about 85% of all cases of depression are associated with an identifiable adverse life event or long term difficulty. He calculated a relative risk of 6.5 for depression, 3 for schizophrenia and 6.7 for suicide attempts. In the latter case, a peaking of events in the month prior to the attempt produced a one month relative risk of 10.

These studies would seem to add further to the conclusion that life events occur in particular excess among depressed patients.

#### 2.2.6 Cross Cultural Aspects

A retrospective study by Chaleby (1986) amongst Saudi Arabians highlights the need for life event studies among people of non-western culture. The orientations and philosophies of these individuals are far different from individuals of western culture, and for life event studies to have continued credence, cross-cultural comparisons are imperative. The study by Chaleby was carried out on a psychiatric outpatient sample. Demographic data were recorded and stressful life events were classified as follows:

1. Marital stresses.
2. Family stresses evolving from situations both within and outside the family e.g. parent-child conflict; presence of a divorced or widowed

relative in the house; caring for a retarded or crippled relative; difficulties with in-laws; having strict parents; parent in polygamous marriage; separation from one's children; many family members living together.

3. Stresses at work.
4. Economic stresses.
5. Grief reactions.
6. Physical illness.
7. Other stresses including traumatic experiences; frustrated love affairs; culture changes; infertility; miscarriage.

Of the 270 cases, 52.6% reported that stressful life events contributed to their symptoms. The emergence of family problems as a major stress has its roots in the family structure of the Saudi culture. The strong family ties and the closeness of the extended family system are advantageous for the protection of the members but increases the individual's sensitivity to disharmony in the big family. The passive role adopted by the females in a male dominated society explains the statistically significant difference between male (36%) and female (65%) reporting of stresses. This contrasts sharply with 41% reported for a western female population. There was a relative absence of economic and work stresses which was not unexpected considering the economic boom in Saudi Arabia. This study is of value in terms of demonstrating a unique set of life events as pertains to a non-western culture.

In a South African study, Chohan (1984) ranked life events cross culturally using the Indian South African as his study sample and compared this group to 14 diverse groups. Of the 50 items of the Social Readjustment Rating Questionnaire - Chohan's Adaptation (SRRQ-CA) (Chohan, 1984) rankings were available for 34 items. The following results were reported:

1. Only ten (29%) of the 34 items appeared to be ranked concordantly by all groups. These were:

Item No.	Life Event
12	Death of spouse
14	Major personal injury or illness
39	Loss of job
3	Major change in health of family member
6	Major change in the number of arguments with spouse
8	Son or daughter leaving home
29	Change in residence
22	Major change in eating habits
38	Major change in the number of family get-togethers
30	Minor violations of the law.

2. Eight (24 %) items appeared to be ranked lower by the various cross cultural samples than by the study sample. These were:

Item No.	Life Event
13	Death of a family member
47	Jail sentence
5	Death of a close friend
43	Troubles with boss
44	Major change in hours or conditions of work
18	Major change in living conditions
31	Major revision in personal habits
21	Major change in sleeping habits.

It would appear that these 8 life events required more social readjustment for the Indian South Africans than for the cross-cultural samples.

3. Sixteen (47%) items seemed to be ranked higher by the various cross-cultural samples than by the study sample. These were:

Item No.	Life Event
46	Divorce or separation
15	Sexual difficulties
49	Mortgage or loan over R10 000
7	Troubles with in-laws
28	Major business readjustment
42	Major change in work responsibilities
41	Change of job
45	Embarked on studies
40	Retired from work
4	Marital reconciliation
2	Pregnancy
20	Major change in recreation
1	Marriage
23	Vacation
19	Outstanding personal achievement
10	Addition of new family member.

It would appear that these 16 life events required less social readjustment for the Indian South Africans than for the cross-cultural samples.

Chohan concluded that an important factor responsible for major differences in the ranking of life events is that an individual's perception of life events is a function of his social, cultural, and religious background. The Indian South African is, in that respect, different from the cross-cultural samples. Further studies in this direction would be helpful in delineating specific sets of stressful life events within different cultures. This would have important implications for psychotherapy.

#### 2.2.7 Methodological Issues in Research on Life Events

Assessment of the relationship between life events and affective illness is beset by several methodological problems. Until such time that these

problems are solved, life events studies will continue to be criticised.

Major problems remain in establishing a causal role for life events in psychiatric disorder. There seems little doubt that the relationship between life events and such disorder is at least a reciprocal one. It may even be more complex and take the form of a positive feedback model in which events provoke disorder which causes more events, in turn provoking more severe disorder and so forth. Prospective studies can help to reduce the problem of establishing the time relationship between events and illness. While life events may be discrete, the onset of many psychiatric conditions, such as depression, is not.

Stemming from this is the problem of retrospective falsification of the impact of life events or the social context in which they occur. It is highly possible that depressive symptoms may influence the reporting of life events, thus producing a spurious causal link between events and the onset of depression. A critical issue in all causal research is that the antecedent variable (life event) and the criterion variable (depression) are separate in their content. In this regard life event measures have been severely criticised because they contain items which may be symptoms of illness or are illness related (Tennant et al, 1981). This limitation seriously undermines the value of studies which use these instruments to argue the life-events model.

Life event instruments have also been criticised on the number, scope and specificity of items. The instrument is used to identify the specific nature, quality or type of event which is associated with depression. Hence the assessment of subtle qualities of life events is all important. For this purpose, a measure which is comprehensive and includes a wide range of events of differing qualities, severities and types is required in order to contrast those events which possess the hypothesised pathogenic qualities with those that do not. In a comprehensive detailed semi-structured interview, Brown and Harris (1978) attempted to elicit all the relevant life events which had occurred in a designated period. The details of each event and the social context within which it occurred were recorded. Information obtained in this manner was considered to be both a comprehensive and a highly specific account of that subject's experience of life events.

A critical issue in research is that of reliability. Adequate reliability of reporting of life event items is necessary before content validity can be claimed for indices of stressful life events (Tennant et al, 1981). Reliability of reporting can be measured in two ways:

1. test-retest with one informant
2. inter-informant agreements

Reliability of life event measures is not perfect on either. Horowitz et al. (1977) found that of those events reported by a sample of psychiatric patients, only 60% were reported on retest six weeks later. Mendels and Weinstein (1972) have shown retest reliability to be as low as 0.5 - 0.6. The lack of item specificity in the instrument used may be one factor contributing to these poor test-retest results. Regarding inter-informant reliability, several studies have shown a low agreement between the subject and a close informant, such as a spouse, about the occurrence of a particular life event in the subject's life. Hudgens et al. (1970) found a 51% overall agreement between patient and close relatives regarding reporting of an event. This low level of agreement was attributed as much to disagreement about the severity of the event as to the disagreement about its actual occurrence.

Tennant et al. (1981) in conclusion states that many of the studies from which a causal connection between life events and depressive illness is inferred, are so weak methodologically that little can be made of them. Because of the problems encountered, it is still not certain that life events are associated with depressive illness.

#### 2.2.8 Conclusion

Based on the review of research on life events a number of conclusions can be drawn regarding the status of research in this area:

1. Depressed individuals report more life events than the general population, and the population with other psychiatric disorders, in the months preceding depressive onset.
2. Life events may be related to depressive relapse.
3. Life event instruments vary in the number, scope and specificity of items. These instruments have been criticised because they contain

items which may be symptoms of depression rather than the cause of depression.

4. Research in the field of life events is correlational and thus the possible causal role of life events is not determined.
5. Life event studies are generally retrospective in nature. This has given rise to the criticism that retrospective falsification of the impact of life events might have produced a spurious association between life events and depression. On the basis of this criticism, prospective studies are encouraged to corroborate retrospective findings and to lend strength to causal explanations, and until this is done one cannot rest too comfortably with such a conclusion.
6. More importantly, investigators should attempt to identify those factors that mediate the relationship of stressful life events and depression. Rabkin and Streuning (1976) have identified potential mediating factors that fall into three broad categories: characteristics of the stressful situation; individual biological and psychological attributes; and characteristics of the social support system available to the person. It seems likely that it will be this comprehensive approach which will lead to the much-needed expansion of knowledge in this area.

Perhaps the most useful way to conceptualise future research is to use a model in which psychiatric risk is seen to be a function of the individual person's psychological vulnerability to stress, the extent to which he or she has been recently exposed to stressful experiences, and the amount of social support available to assist in coping with such stressors. In this manner, not only will our understanding of causes be enhanced, but persons at risk may be identified so that preventive efforts can be undertaken.

## 2.3. SOCIAL SUPPORT

### 2.3.1 Introduction

Social interactions among people are commonly considered to be an important aspect of everyday life and social scientists have long recognised that social relationships form an integral part of people's lives (Durkheim, 1951). In human evolution there is likely to have been preferential selection for the capacity to form social bonds, because this would have promoted survival both of the individual and of the group under primeval conditions. This is certainly upheld by observations on the social behaviour of infrahuman primates by such workers as Harlow (1960). Information available on the social organisation of early man indicates that the species has lived in bands as hunters and gatherers, usually numbering 20 - 50 adults. Clearly, a degree of affectional cohesion would have been necessary for such bands to operate effectively. Social bonds would therefore have conferred species advantage for survival.

Social bonds have come to be essential not only in their fundamental prototype, the primary affectional bond with the mother in infancy, but throughout all of life. These bonds, having become a valuable component of the human behavioural repertoire, are necessary for persons to maintain a reasonable degree of affective comfort and to operate effectively in the face of adversity. Bowlby (1973) concluded that human beings of all ages are at their happiest and most effective when they are confident that there are one or more trusted persons behind them who will come to their aid should difficulties arise. Such a trusted person provides a secure base from which to operate. For most adults in western communities, the main attachments are with a few highly discriminated persons of whom the spouse is commonly the most prominent, followed by close kinsmen and friends.

Despite this fund of information, it has only been in the past decade that researchers have hypothesised that social relationships may have health promoting effects. Specifically, it has been hypothesised that support from others may be related to how effectively individuals cope with stress (Caplan, 1974). Recent research in the area of social support has yielded a variety of approaches to its study and an accumulating body of information regarding the nature and function of social support. On the



whole, studies have shown that a range of physical and mental disorders occur more frequently among individuals lacking in social support (Henderson, 1974; 1977; 1981; Cassel, 1974; Kasl et al, 1975; Cobb, 1976). Interventions aimed toward facilitating the development of social support systems could represent an important new direction within clinical, community and health psychology for promoting physical and mental health, with implications for both prevention and treatment.

### 2.3.2 Conceptualisation of Social Support

Research has brought such terms as "social support", "support networks", and "support systems" into prominence within the literature on stress and health. Among the most eminent of researchers is Cassel (1974) who argues that a variety of social factors play a significant role in determining susceptibility to disease in general. Although Cassel brings together a variety of research findings and weaves these into a common theme of social support, there is as yet no complete, precise, and consensually agreed upon definition of social support. Some have offered conceptual definitions while others have taken an empirical approach.

In developing a conceptual definition of social support, Caplan (1974) emphasised emotional and cognitive support as well as tangible assistance in his classification scheme. "The significant others help the individual mobilise his psychological resources and master his emotional burdens; they share his tasks; and they supply him with extra supplies of money, materials, tools, skills, and cognitive guidance to improve his handling of his situation" (Caplan, 1974).

For Cobb (1976), the essential feature of social support is the provision of informational feedback. Social support is defined as "information leading the subject to believe that he is cared for and loved, esteemed, and a member of a network of mutual obligation. It appears that social support can protect people in crisis from a wide variety of pathological states. Furthermore, social support may reduce the amount of medication required, accelerate recovery and facilitate compliance with prescribed medical regimens".

Henderson (1977) hypothesised that humans are biologically programmed to prefer to be members of groups and to display emotional distress when the

presence of important others is lost. Henderson suggested that people need other people because of what these others supply. This includes attachment, social integration, opportunity for nurturing others, reassurances of worth, a sense of reliable alliance, and the obtaining of guidance.

Despite differences in terminology and in classification systems, there is a basic distinction to be made between tangible and psychological forms of support (Schrader and Dougher, 1986). Tangible support refers to the provision of tangible resources, such as money or other material aid, and to direct physical intervention in the environment to reduce sources of stress. Psychological support refers to the provision of information which serves a supportive function, such as leading an individual to believe that he or she is cared for and valued. Psychological support can be further divided into emotional support and problem solving support. Emotional support includes interacting in an intimate manner such that feelings and personal concerns are addressed with warmth and understanding. Problem solving support includes offering advice as well as providing information about problem situations and providing problem-focussed feedback to an individual about his coping efforts.

Cassel (1976) and Henderson (1977) reviewed a wide range of studies which indicated that the social support provided by primary groups serves as a protection, buffering or cushioning the individual from the physiologic or psychologic consequences of exposure to the stressor situation. It is not clear whether these factors exert their effect independently of life stress or whether they become important by moderating the effect of high life event stress. This buffering model posits that stress has a greater adverse impact on those with limited as opposed to adequate sources of social support.

However Aneshensel and Stone (1982), in their study, concluded that a major alternative posits a more active role for support. The presence of support is beneficial in and of itself, and its absence is itself a source of stress.

The process of defining social support is therefore far from complete. Definitions remain somewhat unprecise. An experimental approach could provide an avenue for further clarification of the important dimensions of

support by systematically exploring potentially supportive behaviours in controlled settings.

### 2.3.3 Empirical Evidence Relating Social Support and Depression

Research reports a positive association between social support and health status. Generally studies have shown that a variety of disorders, including coronary heart disease; respiratory disease; suicide; neurotic symptomatology, and schizophrenia occur more frequently in people who lack friends, family, or a social group to which they could relate (Jenkins, 1976; Miller and Ingham, 1976; Tolsdorf, 1976; Kaplan et al, 1977; Henderson et al, 1978; Israel, 1982). Social support would thus appear to play a role in the aetiology of both physical and mental disorders, suggesting the possibility of interventions aimed at increasing social support within clinical settings. It must be borne in mind that these findings are entirely correlational and thus the possible causal role of social support is not determined (Henderson et al, 1980).

Henderson et al.(1978) differentiated between two types of social bonds, namely attachment and social integration. Attachment is defined as a sense of security provided by affectionally close relationships, such as commonly found between spouses. It is based upon affection, mutual trust and support. Social integration refers to membership of a network of persons who share common concerns and values. This network provides companionship, a base for social events, the sharing of common experiences and an opportunity for the exchange of services. Henderson et al. found a strong link between neuroses and deficiencies in social bonds and that this association was stronger for close affectional bonds than for relationships with friends and acquaintances. These findings were replicated in a later study (Henderson et al., 1980). Both attachment and social integration were found to be negatively associated with neuroses. This association was found to hold true in its own right in addition to buffering the effects of recent stressful experiences.

Further evidence for the buffering hypothesis comes from a study by Nuckolls et al. (1972) who studied the joint effects of stressful life events and psychosocial assets on complications of pregnancies. Taken alone, neither life change nor psychosocial asset scores were significantly related to complications. When these variables were

considered jointly, it was found that if the life change score was high, women with favourable psychosocial assets had only one-third the pregnancy complication rate as compared to women with low psychosocial asset scores. This study provides evidence that stressful events lead to complications only in the absence of such assets, suggesting that social support may indeed help buffer individuals against the negative physiological consequences of stress. O'Hara et al. (1983) and O'Hara (1986) found that post-partum depressed women viewed their spouses and confidants as being deficient in the amount of support that they provided. Depressed subjects reported that their spouses provided insufficient emotional and instrumental support, were not there when needed, were less available for help with child care and made their lives less easy.

Wilcox (1979) found that the observed life events by social support interaction conformed closely to that predicted by the buffering hypothesis. At higher levels of life change scores, high levels of social support were associated with lower levels of self-reported psychological distress while low levels of social support were associated with higher levels of psychological distress.

An interesting longitudinal study was carried out by Kasl et al. (1975) on the effects of involuntary job loss on the physical and mental health status of a group of men whose jobs were discontinued because of plant closings. Men with high levels of support were found to have lower cholesterol levels, fewer physical symptoms and less evidence of depression than men with low levels of support. This study provides further evidence for the buffer hypothesis.

An alternative to the buffering model is that social support has direct positive effects on psychological well being by fulfilling a person's need for affiliation, belonging, respect, social recognition, affection and nurturance (Aneshensel and Stone, 1982). By implication, the frustration of these needs (lack of support) may itself constitute a source of stress. Thus, in addition to or instead of buffering the effects of stress, social support may have an independent or "main" effect on depressive symptomatology. It should be noted that these two models of social support are not mutually exclusive. Thus social support could have a positive effect on the individual's mental state independently of the level of stress and, additionally, modify the effects of stress.

Aneshensel and Stone concluded that the presence of support is beneficial in and of itself, and its absence is itself a source of stress and that this alternative model is more tenable than the buffering model.

It appears from the above that neither a model hypothesising a direct link between low levels of support and subsequent disorder, nor a buffering model of support adequately accounts for the data. Perhaps more complex models may provide a more fruitful direction for future research.

A slightly different stance was adopted by Brown and Harris (1978) in their study of depression. Their model has two important aetiological elements: provoking agents and vulnerability factors. Provoking agents are defined as events with severely threatening long-term implications or long-standing social difficulties. Vulnerability factors are those with social or personal characteristics which increase the likelihood of an individual developing an affective disorder in the presence of severe life stress (provoking agent). In their study of women in Camberwell, Brown and Harris (1978) identified four vulnerability factors which influenced the impact of life stress. These factors were:

1. The loss of mother by death or separation before the age of 11 years;
2. The presence of three or more children aged 14 years or under at home;
3. Lack of paid employment;
4. Lack of an intimate confiding relationship with a husband or boyfriend.

Brown and Harris found that the mere presence of a vulnerability factor did not increase the risk of psychiatric disorder when there was no concomitant provoking agent. They argued that the vulnerability factors reduce the individual's psychological resources, in particular self-esteem, such that there is likely to be a generalisation of feelings of hopelessness after any specific loss. In particular, the lack of an intimate, confiding relationship has been shown to increase vulnerability in several studies (Roy, 1978; Costello, 1982; Solomon and Bromet, 1982; Campbell et al, 1983).

In summary, it appears that individuals who are lacking in social ties, whether this results from a loss of social support or from a more general lack of social support, appear to be at increased risk of acquiring a

variety of diseases and psychiatric disorders. There is also some evidence to suggest that there may be positive benefits associated with social support which help individuals withstand a variety of stressful life events. However, research to date has provided little in the way of specific hypotheses about the circumstances in which social support is expected to be beneficial, thus leaving behind a trail of unanswered questions.

#### 2.3.4 Methodological Issues in Research on Social Support

One major problem encountered in attempting to synthesise the research on social support is the fact that a wide variety of methods have been used to assess social support, and few have been used repeatedly or consistently. Given the lack of a consensual definition of social support and the breadth and inclusiveness of most definitions which have been offered, it is not surprising that the concept has been operationalised in what Wilcox (1981) describes as a "somewhat bewildering assortment of ways".

Lazarus (1966) provides a framework in which social support enters into the balance of power between threat on the one hand and the counterharm resources that are available at the individual's disposal on the other hand. This framework demands that individual differences be taken into account in hypothesising how social support may intervene in the cognitive processes which underlie threat and which result in stress reactions. Although Lazarus suggests that having support from others may help the individual perceive a stressful situation as somehow less threatening, the mechanism through which this may occur is not well explained. Fisher et al. (1982) suggest that aid is supportive to the extent that the recipient views it as self-esteem enhancing. Using this model, support may enhance an individual's self-esteem and thus shift the balance of power in favour of the individual's counterharm resources.

Heller (1979) emphasises that the basic methodological weakness of correlational design is repeated over and over again in many of these studies. Although correlational studies have progressed toward an understanding of the role of social support, the current need is for more specific knowledge. We need more finely ingrained analyses of the active ingredients of social support and how these are related to stressful

events. Schaefer et al. (1981) conclude that attention to the various forms and functions of support and greater specificity in hypotheses are important if we are to advance our understanding of the role of social relationships in physical and mental well-being.

Gottlieb (1981) outlined a helpful framework for distinguishing the approaches adopted by various researchers in the study of social support. Gottlieb grouped research studies into three categories, each with its own definitions, type of measures, and level of analysis. At the macro level of analysis, the social integration approach concerns itself with people's involvement with the institutions, voluntary associations, and informal social life of their communities. At their mezzo level of analysis, the social network approach narrows the interactional focus to the pattern of relations that people maintain within a distinct social aggregate. Here, analysis centres on structural differences among people's social worlds and the ways these differences determine differential coping and adaptation. Finally, the micro level of analysis enquires into people's access to intimate relationships and seeks to identify the resources available in such confiding ties.

Some researchers have taken a hybrid approach, combining different levels of analyses within a single study. Barrera (1981) views these various approaches to the study of support as a reflection of the multi-faceted nature of support, and he advocates the systematic development of multi-dimensional assessment tools.

### 2.3.5 Conclusion

Based on a review of the research on social support, a number of conclusions can be drawn regarding the status of research in this area.

1. Research in this field suffers from a lack of an adequate definition of the construct of social support and from a failure to integrate this construct within a larger theoretical framework. There is as yet no consensually agreed upon method for classifying behaviours as supportive.
2. It is difficult to determine the differential effects of various types of support since these are typically confounded in the

research.

3. Individuals with low levels of social support appear to be at increased risk for developing a variety of disorders. However, research studies are almost entirely correlational and thus the possible causal role of social support is not determined.
4. Loss of support is generally a significant predictor of physical disease and psychological maladjustment. However, this may be due to the disequilibrium and disruption of established patterns which typically accompany such loss rather than to any decrease in support.
5. There is some evidence that the relationship between stressful life events and disorder is greater among individuals with lower levels of support (i.e. that support serves as a buffer against stress). Some studies, however, have failed to find any evidence of such a buffering effect but have instead shown support to have an independent relationship with disorder.
6. A wide variety of instruments have been used to assess social support and few of these have been used repeatedly or consistently, making it difficult to draw meaningful comparisons across studies at present. Measurement instruments must be more thoughtfully integrated with theoretical conceptualisations of support.
7. Attention to the various potential forms and functions of social support and greater specificity in hypotheses are needed. More complex models, incorporating a multi-dimensional view of support and its effects, seem warranted.

The basic question of whether social support may help individuals cope with stressful events remains largely unanswered. The hypothesis that support merely covaries in natural circumstances with other factors more importantly related to physical and mental health, or that obtained correlations between support and health are artifacts of self-report measurement techniques, cannot be ruled out. Further experimental research regarding social support is clearly needed.



## 2.4 RELIGIOUS AFFINITY

### 2.4.1 Introduction

Religious affinity refers to strength of belief in a supreme being who is conceived as the director and controller of the destiny of man and the course of nature. Although religions revolve around a central power of authority, the interpretations of that power reveals differences among the major religions. Hindu, Islamic, and Christian religions differ in their philosophies, traditions, customs, practices, and modes of worship. Despite these differences, contemporary observations indicate that religion plays an important part in the lives of the majority of Indians (Tilak, 1975). Although this community has been exposed to over a century's impact of western influences, religion continues to permeate the Indian way of life. It is common practice among Indian South Africans from various walks of life to observe significant events such as births, deaths, and marriages through the medium of religion. The many temples, mosques, and churches that have sprung up in new Indian townships and settlements in the Republic in recent years, bear testimony to the fact that religion is very much alive amongst Indian South Africans. Religious festivals and rituals continue to be observed with great pomp and ceremony. From time to time religious teachers and learned men from abroad are invited to rejuvenate interest in religion. Religious healers play an important role in the Indian community. People from all sectors of the community utilise their ascribed powers of healing, whether of physical or mental illness. In the majority of cases of mental illness, the religious healer is the first source of contact. Treatment consists of rituals, medicines, and praying from the Holy Scriptures. Religion has a strong pervasive influence over the lives of the Indian people, and in times of calamity their religious convictions are further strengthened. Thus it is apparent that religion is inextricably bound up with all aspects of the Indian person's way of life (Tilak, 1975).

### 2.4.2 Empirical Evidence Relating Religious Affinity and Depression

Although there is a great wealth of literature on broad aspects of religion, the concept of religiosity as a variable in health and in mental

illness has not been researched. Psychiatric literature is sadly lacking in this respect, to the detriment of the clinician and the patient. This paucity in literature might possibly be attributed to a discrepancy in the interpretation of religion between the public and psychiatric profession (Larson et al, 1986). First, some of the most visible psychiatric opinions on religion have come from the psychoanalytic genre, perpetuating Freud's complex, contradictory and confusing interpretation. Such interpretation of religion has frequently been criticised as inaccurate because it is conceptually reductionistic (Kung, 1984). Second, the bulk of clinical psychiatric literature has focussed on psychopathological and neurotic uses of religion among psychiatric patients - a skewed sample without a comparison group. The function of religion in normal lives presents different interpretations (Pattison, 1969). When the religion of psychiatrically impaired individuals was contrasted with community controls, the controls more frequently were associated with a church and attended church (Stark, 1971). Third, compared to the general population, a substantial number of psychotherapists exhibit a model of "religious apostasy", a term coined by Henry et al. (1971). Religious apostates grew up in homes holding to theistic beliefs but now profess to be atheistic or agnostic or have no beliefs. Of the Henry et al. study, some 29% had become apostate. The highest rate of apostasy (40%) was among psychoanalysts, compared with 26% for the non psychoanalytic psychiatrists, clinical psychologists and psychiatric social workers. Another point of note is that in America in recent years a number of mental health professionals have been attracted to alternative religious perspectives as represented by Eastern traditions, transcendental psychologies, meditation, and mysticism.

Although the religious beliefs and practices, or lack of these, of the mental health professionals may vary, it should not influence who consults with them or comes to them for treatment. The few studies done demonstrate otherwise. Kadushin (1969) found that clergy members referred significantly more often to the religious psychiatric clinic, while the psychologists and psychiatrists referred more to the psychoanalytic and hospital out-patient clinic. Concerning community consultations, psychiatrists providing services to the religious sector more frequently attended church and observed religious rituals or ceremonies than did those not providing services to the religious sector. As to who seek care from mental health professionals, research has shown

that those who have no religious beliefs are over utilisers (Tischler et al, 1975). The presence or absence of theistic beliefs not only influences patient choice about obtaining therapy, it influences therapist choice about obtaining their own personal therapy. Henry et al. (1971) sampled more than 3000 mental health professionals and found that those with theistic beliefs had received therapy much less often than did those with atheistic, agnostic, or no religious beliefs. These findings confound research in this difficult area; it becomes difficult to assess how many individuals substitute religious practices for mental health treatment. A recent national survey (Veroff et al, 1981) permits a comparison of those using prayer versus mental health professionals for their emotional problems. Far more prayed than received treatment for their "unhappiness" or "worries". Between 1% and 2% had used mental health professionals for periods of either unhappiness or worries. On the other hand, prayer had been used by 20% to cope with their worries while 30% prayed to cope with unhappiness.

The religious needs of help-seeking individuals is evidenced by an increase in formal pastoral-counselling activities of the clergy. In 1960 Gurin et al. reported that Americans used the clergy as their primary source of help for personal problems - 42% of those who sought help sought it from a member of the clergy. In contrast 29% went to general physicians, 17% to psychiatrists, and only 10% to mental health facilities. In 1976 Veroff et al. revealed the continuing importance of clergy counselling. They demonstrated that 34% of all help seeking individuals still sought their primary help from the clergy. The authors concluded that in spite of important shifts toward greater use of mental health professionals, the clergy continue to play a critical role in assisting many Americans in dealing with personal problems. This is especially so of the black churches which serve a therapeutic function in providing mental health benefits to its people. The black minister is an experienced religious professional actively engaged through counselling, in meeting the serious mental health needs of his community.

#### 2.4.3 Methodological Issues in Research on Religion

Larson et al, (1986) in a major review on religious variables, selected four major psychiatric journals and analysed all issues for the 5 year period 1978 - 1982. A total of 3,777 articles were scanned. The

following results were reported:

1. 59 papers contained a quantitative religious variable and of the 59 papers, only three included religion as a major emphasis of the study.
2. The majority of articles (37) used a single weak denotative measurement (denomination) while a small proportion (5) used appropriate multiple measurements of religiosity.
3. An analysis of the number of reference citations to religious research showed that of 59 studies, 51 (86%) had no such references, 2 (3%) had one reference, and 6 (10%) had two or more.

Larson et al. state that the clinical practice of psychiatry is ill served by the current inadequacies in the psychiatric literature.

Psychiatrists, without religious beliefs or ambivalent about their beliefs, in perusing the psychiatric literature may be reinforced in their belief that knowledge of religion is irrelevant and may thereby misinterpret the religious dynamics of their patients' lives. For the religious psychiatrist, the same literature provides little stimulus to broaden their religious knowledge base beyond their sectarian personal knowledge; thus they are just as liable to misinterpret their patient's religious dynamics. In addition, psychiatry knows little of the benefits of religion, since it seldom assesses it either as an independent variable in association with emotional health, or as a dependent variable of a psychotherapeutic or psychosocial intervention. In its crassest form, psychiatry views religion as neurotic, immature or a solace for the mentally disturbed. This is at variance with empirical generalisations from other psychosocial research which demonstrate that the mentally ill are less religious and engage in less religious activity, whereas the psychologically healthy are more religious and engage in more religious activity (Larson et al, 1986).

#### 2.4.4 Conclusion

Judging by the literature survey, there is a serious lack of psychiatric research on religion, which can be regarded as an important psychosocial variable. This state of affairs is unfortunate and is likely to result

in continued misinterpretation of religious knowledge and beliefs as held by the public and by the psychiatric profession. As a direct consequence of this, the religious dynamics of healthy individuals and of those who are psychiatrically disordered, will either be ignored or remain unexplored. Methods need to be devised to evaluate the variable of religious affinity as it influences the occurrence of psychopathology. If this aspect of research is neglected, it will perpetuate the dichotomy between religion and psychiatry to the detriment of the patient as well as the clinician.

## CHAPTER 3

### PATIENTS AND METHODS

Informed consent was obtained in writing from all subjects who participated in the research (see Appendix A).

The research design of the investigation involved the analysis of questionnaire responses of an experimental group of depressed patients and a group of matched community controls.

#### 3.1 SAMPLE SELECTION

A retrospective analysis of files of patients attending a psychiatric hospital over the past two years, revealed that the majority of depressives were females. On the basis of this finding fifteen Indian South African female depressives attending King George V Hospital and Northdale Hospital, during the period July 1986 to September 1986, were interviewed. Patients who fulfilled the following selection criteria were considered:

##### Selection Criteria

1. Females.
2. Age range 18 - 45 years.
3. First - admission patients.
4. Diagnosis of non psychotic unipolar depression made according to the criteria of the Diagnostic and Statistical Manual of Mental Disorders, 3rd edition (D.S.M. III , American Psychiatric Association, 1980).
5. Income group of under R500/month.

This group of subjects was designated the Experimental group. In a similar manner, fifteen matched Controls were selected from the community during September 1986. The subjects were matched according to the following criteria:

- 1) Sex
- 2) Age
- 3) Religion
- 4) Income group
- 5) Marital status
- 6) Educational level
- 7) Occupation

Disqualifying criteria used in the selection of the Control group were:

- 1) Family history of mental illness
- 2) Any previous or current psychiatric disorder or treatment.

### 3.2 INSTRUMENTS USED

#### 3.2.1 Biographical Inventory

The biographical inventory was constructed to elicit information pertaining to name, age, address, marital status, highest education level reached, employment, and nett income. In addition, data specific to the experimental group included hospital number, date of illness onset, date of starting treatment, previous admissions and previous psychiatric treatment (see Appendix B).

#### 3.2.2 Social Readjustment Rating Questionnaire - Chohan's Adaptation

The life event questionnaire used by the investigator was the Social Readjustment Rating Questionnaire - Chohan's Adaptation (SRRQ-CA) (Chohan, 1984) which is a modification of the Holmes and Rahe Social Readjustment Rating Questionnaire (1967). The SRRQ-CA constituted 50 items categorized into the following groups : Work; Home and Family; Personal and Social, and Financial, and utilising visual analogue scales (see Appendix C).

##### 3.2.2.1 Scoring

Each visual analogue scale measured ten centimetres (10cm) with the words VERY STRESSFUL inscribed at the 10cm mark and NOT STRESSFUL at the zero cm

mark. The score on those life events that were applicable were totalled to give an estimate of life event stress. The time of occurrence for each event was divided into three month intervals covering a period of twelve months. Higher score values were taken to be indicative of greater life event stress.

### 3.2.3 Social Support Scale

This scale was constructed by the investigator. This instrument constituted four items designed to elicit YES/NO responses (see Appendix D). The items used were those reported most frequently in the psychiatric literature which researched the variable of social support. Item 1 (Do you live with your family?) was included in view of the importance of the extended family life style in the Indian South African community.

#### 3.2.3.1 Scoring

Each item was equally weighted. A YES response on an item was equal to a score of one point, giving a maximum total score of four points. Higher score values were taken to be indicative of strong social support.

### 3.2.4 Religious Affinity Scale

This scale was constructed by the investigator. This instrument constituted four items utilising visual analogue scales (see Appendix E). It is evident from a review of psychiatric literature on the variable of religiosity, that most investigators have adopted a limited uni-dimensional approach. It is envisaged by the present investigator that, by the use of a multi-dimensional approach and visual analogue scales, a more valid estimate of religious affinity might be obtained.

#### 3.2.4.1 Scoring

Each visual analogue scale measured ten centimetres (10cm) with the words Very inscribed at the 10cm mark and Not at the zero cm mark. The score on each visual analogue scale was totalled to give an estimate of religious affinity. Higher score values were taken to be indicative of greater religious affinity.



### 3.3 METHOD OF ADMINISTRATION

The Experimental group was interviewed in the respective hospitals. The Control group was interviewed at home at a time convenient to them. All interviews were conducted by the investigator and every precaution was taken not to unsettle the interviewee. Their informed consent was obtained in writing after the nature and the confidentiality of the investigation was explained to them. The Experimental group was informed that this was a study of factors associated with depression in the Indian population. To prevent contamination, the Control group was informed that this was a mental health survey. Regarding the investigation itself, care was taken to ensure that the same set of explanations and instructions were given to both the Experimental and Control group. The interview session lasted 45 minutes on the average.

## CHAPTER 4

## RESULTS

Subjects were all females. From Table I it is evident that no statistically significant differences existed between the Experimental and Control group in terms of a broad range of demographic characteristics.

TABLE I  
Demographic Characteristics of the  
Experimental and Control Group Subjects

Demographic Characteristic	Experimental N=15	Control N=15	t value
Mean age in years:	28.2	28.9	2.09
Mean no. of years of education :	8.4	8.4	
Religion:			
Hindu	13	13	
Muslim	2	2	
Marital status:			
single	7	7	
married	6	6	
divorced	2	2	
Occupation:			
employed	5	5	
unemployed	10	10	
Nett Income/month: R500		R500	

#### 4.1 A COMPARISON OF LIFE EVENT SCORES OF THE EXPERIMENTAL AND CONTROL GROUP

Life Event scores of the Experimental and Control group were subjected to the following analyses:

Mean Total Life Event Stress Scores.  
 Frequency Analysis and Mean Weighting Analysis.  
 Time of Occurrence .

#### 4.1.1 Mean Total Life Event Stress Scores

The result of the comparison between the mean total Life Event stress scores of the Experimental and Control group on the 50 items of the SRRQ-CA are presented in Table II and Fig. 3.

TABLE II  
 Mean Total Life Event Stress Scores of the Experimental  
 and Control Group

Mean Total Life Event Stress Scores	Experimental	Control	t value	p .
	25.46	3.90	4.62	'001

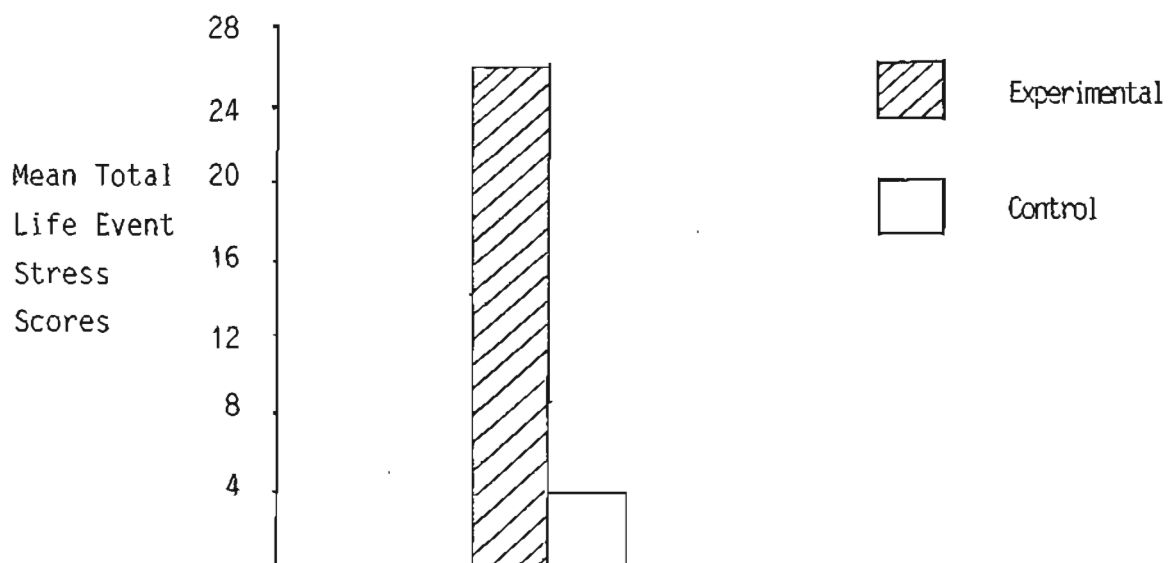


Fig. 3: Histogram Illustrating the Difference Between the Mean Total Life Event Stress Scores of the Experimental and Control Group.

TABLE III - Frequency Analysis and Mean Weighting Analysis of Life Events  
of the Experimental and Control Group

Item	Frequency of Occurrence		Mean Weighting	
	Experimental	Control	Experimental	Control
2. Pregnancy	1		10	
3. Major change in health of family member	5	1	7.5	3.6
4. Marital reconciliation	1		10	
5. Death of a close friend	1		9	
6. Major change in the number of arguments with spouse	3		10	
8. Son or daughter leaving home	1		5.8	
13. Death of a close family member	2	2	3.7	3.0
14. Major personal injury or illness	4	1	9.6	10
16. Death of a close relative	2		8.0	
17. Major decisions regarding the future	11	3	9.1	7.1
26. Extramarital affair (self)	1		7.6	
27. Building a house		1		5
29. Change in residence	1		5.7	
37. Miscarriage	1		10	
39. Loss of job	1	1	9.5	5.5
43. Troubles with boss	1	1	10	2.3
45. Embarked on studies	1		6.3	
46. Divorce or separate	2		9.6	
48. Major change in financial state	2		9.8	
50. Other	3		9.8	
Total number of Life Events Experienced	44	10		
Mean	2.93	0.66		

It is evident that the mean total life event stress score of the Experimental group is significantly higher than that of the Control group at the '001 level of confidence. (t-Test analysis, see Appendix F).

#### 4.1.2 Frequency Analysis and Mean Weighting Analysis of Life Events

In order to establish possible clusters of Life Event stress items, a frequency analysis of the Life Event data was conducted. These items were also weighted. The results of the analyses are presented in Table III.

It is evident that the Experimental group experienced a total of 44 life events (mean = 2.93) while the Control group experienced a total of 10 life events (mean = 0.66) over a period of 12 months. (Table III)

An analysis of the most frequently occurring life events ( $f \geq 3$ ) in the Experimental group is presented in Fig. 4.

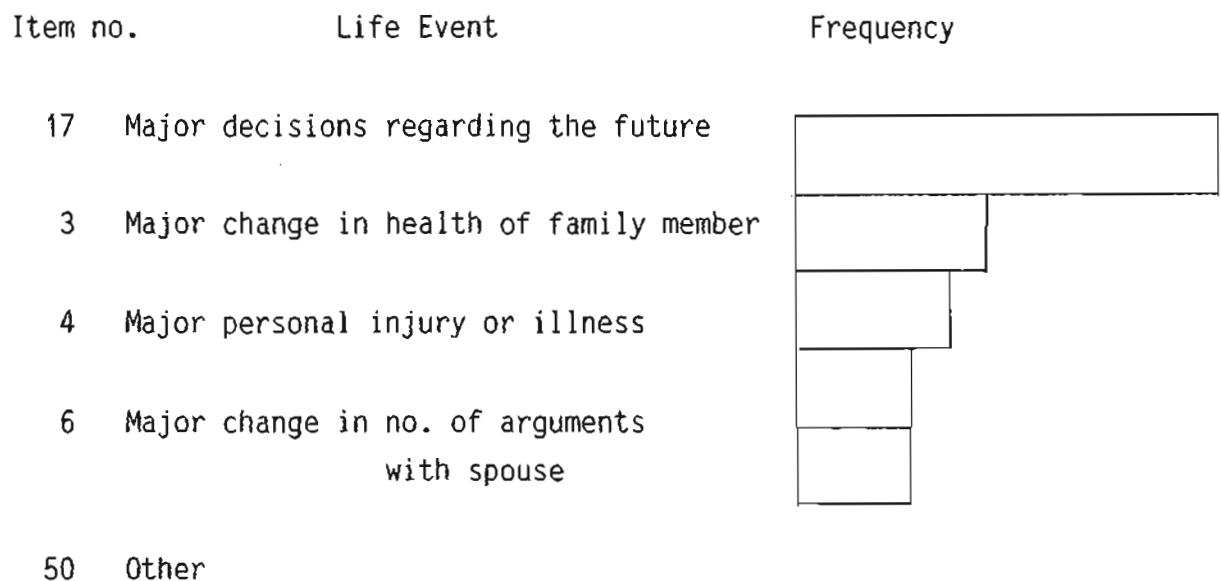


Fig. 4: Bar Histogram Illustrating the Most Frequently Occurring ( $f \geq 3$ ) Life Events in the Experimental Group.

An analysis of the mean weighting of the most frequently experienced life events in the Experimental group is presented in Fig. 5.

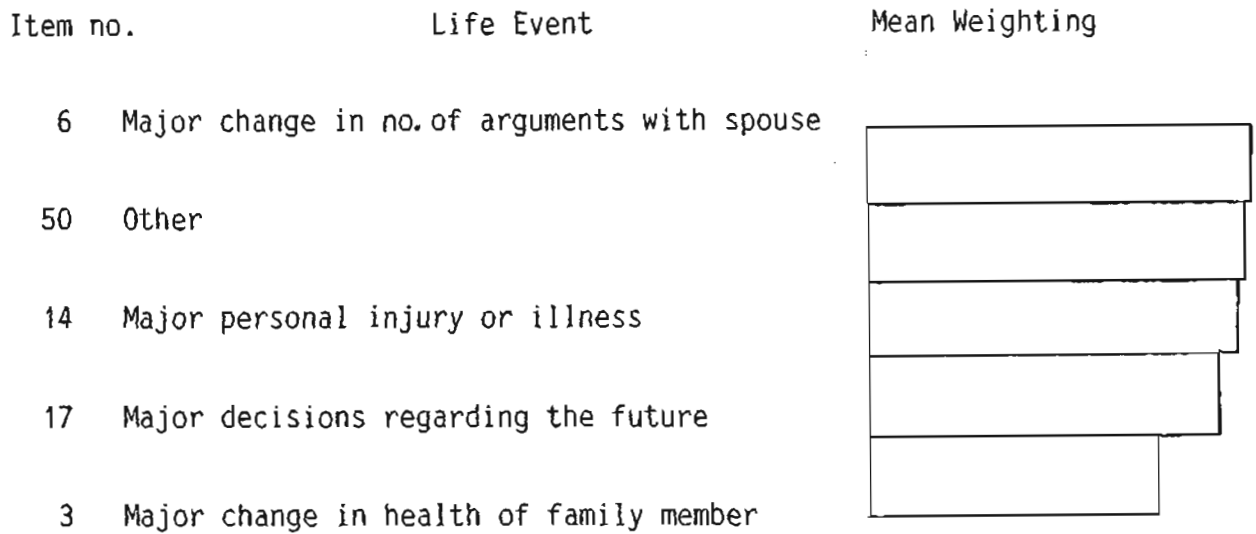


Fig. 5: Bar Histogram Illustrating the Mean Weighting of the Most Frequently Occurring ( $f \geq 3$ ) Life Events in the Experimental Group.

A comparison of Fig. 4 with Fig. 5 illustrates the diametrically opposite patterns that emerge from the frequency analysis and the mean weighting analysis.

A comparison of the above two analyses is presented in Fig. 6.

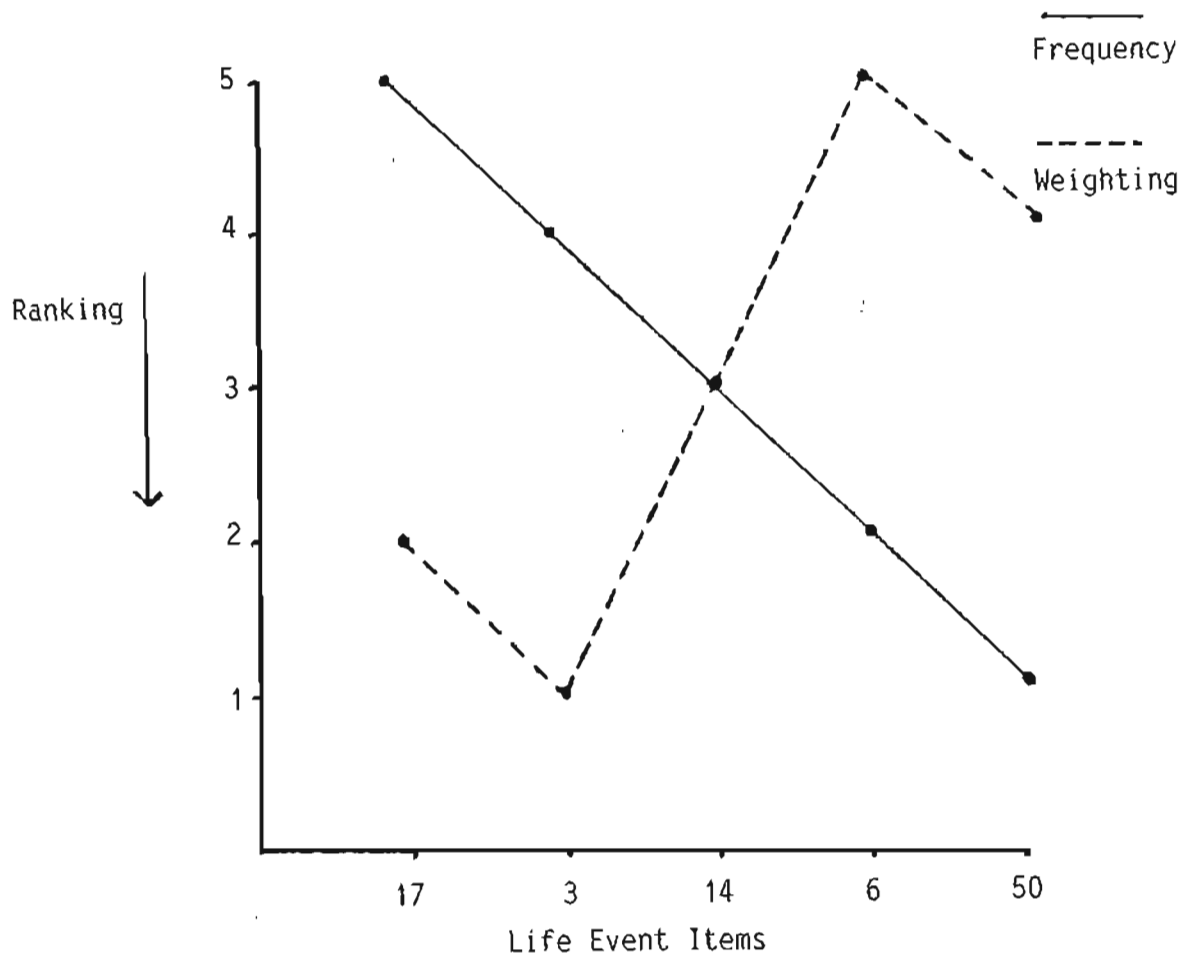


Fig. 6: Graph Illustrating a Comparison of the Frequency Analysis and Mean Weighting Analysis of Life Events.

#### 4.1.3 Time of Occurrence of Life Events

Life Events were also subjected to analysis in terms of time of occurrence. Results of the analysis are presented in Table IV.

TABLE IV  
Temporal Frequency of Total Life Events  
in the Experimental Group

Temporal Frequency of Total Life Events			
0-3 months	4-6 months	7-9 months	10-12 months
13	14	2	15

It is evident that most of the life events occurred within the 0-6 month period and the 10-12 month period.

#### 4.2 A COMPARISON OF SOCIAL SUPPORT SCORES OF THE EXPERIMENTAL AND CONTROL GROUP

Social Support scores of the Experimental and Control group were subjected to the following analyses:

Mean Total Social Support Scores.

Item Analysis of Social Support Responses.

##### 4.2.1 Mean Total Social Support Scores

The result of the comparison between the mean total Social Support scores of the Experimental and Control group on the 4 items of the Social Support Scale are presented in Table V.

TABLE V  
Mean Total Social Support Scores of the Experimental  
and Control Group

	Experimental	Control	t value	p
Mean Total Social Support Scores	2.33	3.06	2.28	.1



It is evident that while the Control group obtained a higher mean total social support score than the Experimental group, the difference between their means narrowly missed significance at the '05 level of confidence. An important factor that could account for this finding was the extremely high variance in the experimental group ( $S^2 = 19.25$ )

#### 4.2.2 Item Analysis of Social Support Responses

The responses of the Experimental and Control group were subjected to an item analysis to ascertain which items contributed towards the difference between the two groups. The results of the analysis are presented in Table VI and Fig. 7.

TABLE VI  
Item Analysis of Social Support Responses of the  
Experimental and Control Group

Item	Experimental	Control
1. Do you live with your family?	12	15
2. Do you have close contact with family members?	6	14
3. Do you have a confidante-someone you can talk to with ease? It may be a relative or friend.	12	15
4. Do you belong to a social organisation such as women's group; club; voluntary social work?	5	2
Total score	35	46

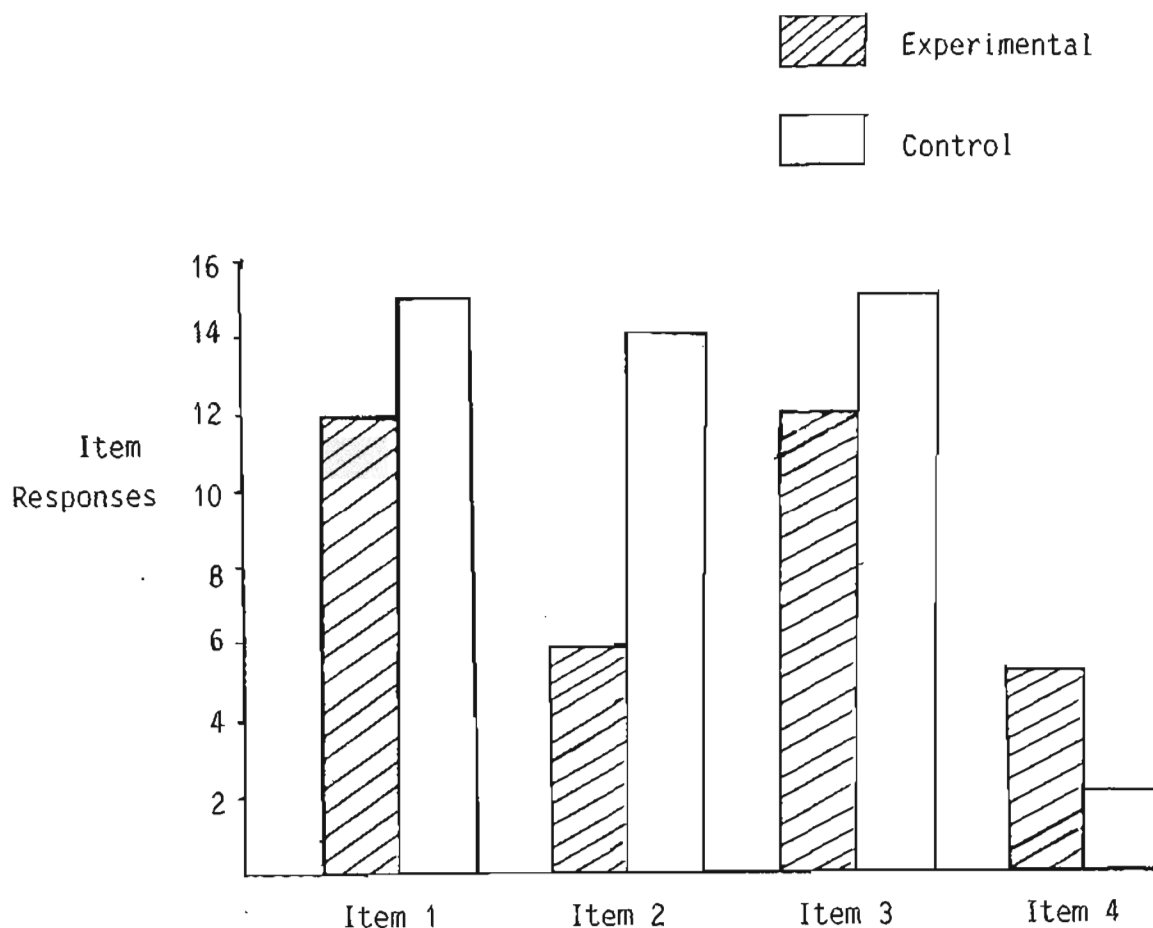


Fig. 7: Histogram Illustrating the Differences in Social Support Item Responses Between the Experimental and Control Group

It is evident from Table VI and Fig. 7 that item 2 (Do you have close contact with family members?) contributed substantially to the difference between the social support scores of the Experimental and Control group.

#### 4.3 A COMPARISON OF RELIGIOUS AFFINITY SCORES OF THE EXPERIMENTAL AND CONTROL GROUP

Religious Affinity scores of the Experimental and Control group were subjected to the following analyses:

Mean Total Religious Affinity Scores.

Item Analysis of Religious Affinity Scores.

#### 4.3.1 Mean Total Religious Affinity Scores

The result of the comparison between the mean total Religious Affinity scores of the Experimental and Control group on the 4 items of the Religious Affinity Scale are presented in Table VII.

TABLE VII  
Mean Total Religious Affinity Scores of the  
Experimental and Control group

	Experimental	Control	t value	p
Mean Total Religious Affinity Scores	29.6	32.9	1.25	>.1

Although the Control group had a higher mean total religious affinity score than the Experimental group, this difference was not found to be statistically significant.

#### 4.3.2 Item Analysis of Religious Affinity Scores

The individual scores of the Experimental and Control group on each item of the Religious Affinity Scale were analysed separately to ascertain which items contributed towards the differences between the two groups. The results of the analysis are presented in Table VIII and Fig. 8.

TABLE VIII  
Item Analysis of Religious Affinity Scores of the  
Experimental and Control Group

Item	Experimental	Control	t value	p
1. How important is religion in your life?	109	128	1.51	>.1
2. How close do you feel to God?	102	123	1.52	>.1
3. How strong is your belief in God?	115	128	.93	>.1
4. How often do you appeal to God in your hour of need?	116	117	-	>.1

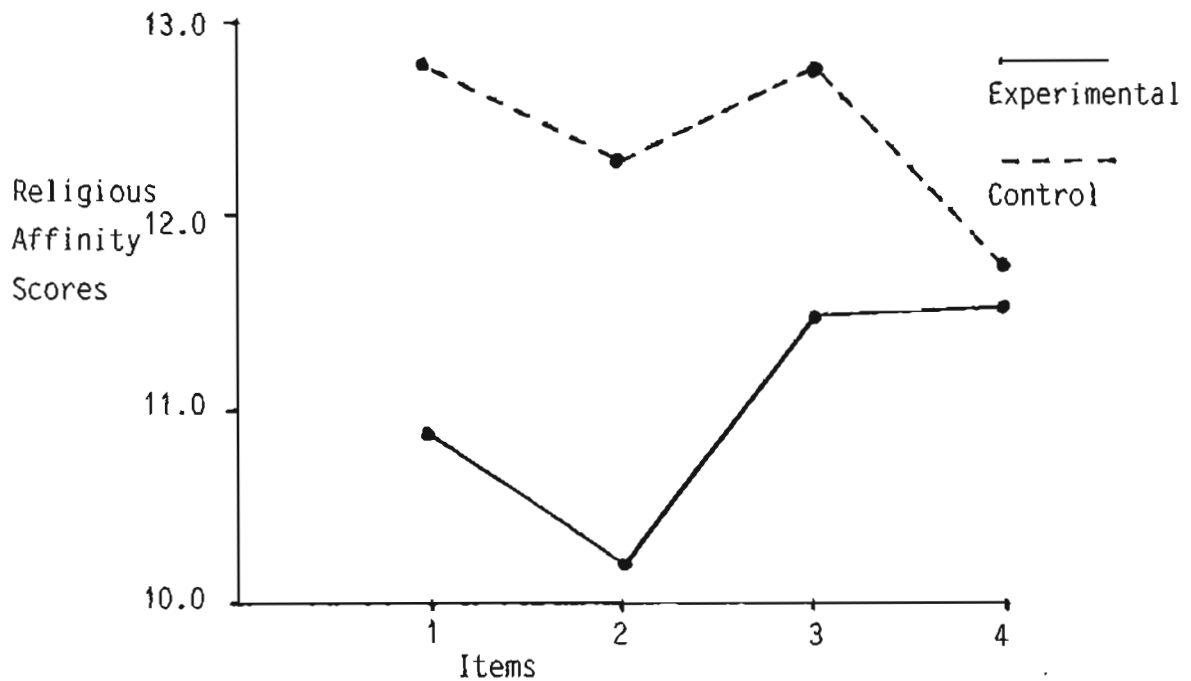


Fig. 8: Graph Illustrating the Differences in Religious Affinity Item Scores Between the Experimental and Control Group

It is evident that items 2 and 1 contributed the greatest to the difference in religious affinity scores between the Experimental and Control group.

In view of the non-discriminatory value of item 4 (How often do you appeal to God in your hour of need?) the differences in Religious Affinity scores

of the Experimental and Control group were subjected to an analysis with item 4 eliminated. The results of this analysis are presented in Table IX.

TABLE IX  
Mean Total Religious Affinity Scores (minus item 4) of the  
Experimental and Control Group

Mean Total Religious Affinity Scores	Experimental	Control	t value	p
	21.8	25.5	1.87	< .1

It is evident that the difference between the two groups is significant at the .1 level of confidence.

## CHAPTER 5

## DISCUSSION OF RESULTS

In view of the fact that the sample size was small (N=15), the interpretation of results obtained should be treated with caution, although statistically significant results were obtained.

### 5.1 A COMPARISON OF LIFE EVENTS OF THE EXPERIMENTAL AND CONTROL GROUP

From the analyses of data presented in Chapter 4, it is evident that:

- A. The Experimental group experienced significantly greater life event stress than the Control group.
- B. The Experimental group experienced four times as many life events than did the Control group.
- C. The most frequently occurring life events, in descending order, were:

Item No.	Life Event
17	Major decisions regarding the future.
3	Major change in health of family member.
14	Major personal injury or illness.
6	Major change in the number of arguments with spouse.
50	Other.

The life events with the highest mean weighting, in descending order were:

Item No.	Life Event
6	Major change in the number of arguments with spouse.
50	Other.
14	Major personal injury or illness.
17	Major decisions regarding the future.
3	Major change in health of family member.

From these two analyses it is apparent that the nature of life events of greatest importance can be categorised into:

- a) Home and Family.
- b) Personal and Social.

Further, it is of note that the main cluster of events are "threatening" and "undesirable" in nature.

- D. The majority of life events occurred in the periods 0-6 months and 10-12 months.

In Chapter 1, the following hypotheses regarding Life Events were stipulated:

1. The Experimental group subjects differ significantly from matched Controls in terms of Life Event stress.
2. The Experimental group subjects differ significantly from matched Controls in terms of number of Life Events experienced.

It is evident from findings A and B that the study supports hypotheses (1) and (2).

The life event findings A, B, and C are in keeping with the literature in general. Paykel et al (1969) concluded that depressed patients experienced more life stress than did general population controls and that depressed patients experienced three times as many events as the control group in the preceding six months. A study of suicide attempters matched against non suicidal depressives and normal controls (Paykel et al, 1975) revealed that the suicide attempt group reported a greater frequency of events than the depressives and four times as many events than did the controls, with a peaking of events in the month prior to the suicide attempt.

With regard to the nature of life events experienced (C above), a notable difference from the general literature review was observed. Hirschfeld and Cross (1982) remarked that depressed patients experienced specific

types of life events, namely more "exit" events, more "undesirable" events and more "threatening" events than did general population controls. Paykel et al (1969) found that "exit" events (e.g. death of immediate family member; marital separation; family member leaving home; serious illness in family member) featured prominently in their study. Similar findings were reported by Brown et al (1973) and Paykel et al (1975). In the current study, while undesirable events were found to be significantly represented, "exit" events did not feature as prominently. The only "exit" event of note was serious illness of family member. This difference is partly within expectation since 'marital separation' and 'family members leaving home' are not frequent occurrences in the Indian community. The absence of death as a life event factor is not so easily explained. It may be that the following factors act as buffering agents in the Indian community:

#### 1. Family Cohesiveness

As a result of the prevalence of the extended family system either in its traditional form (living communally) or its transitional form (not living communally but maintaining frequent contact), a network of support prevails at the time of death and the roles which had been played by the deceased are readily taken over by existing family members.

#### 2. Religious Philosophy

The Indian community, being a deeply religious group, clearly separates individual control from Divine control over matters of destiny. Death is acceptable more so since it is ascribed to a Divine power.

#### 3. Mourning Rituals

Within the Indian community, death is accompanied by well defined mourning rituals which allows an avenue for grief expression. These rituals may take the form of frequent, periodic prayer meetings attended by family and friends.

#### 4. Guilt Issues

The Indian community being family oriented, in all probability experiences a sense of having collectively fulfilled obligations towards the deceased, whereas the western person, being engrossed in



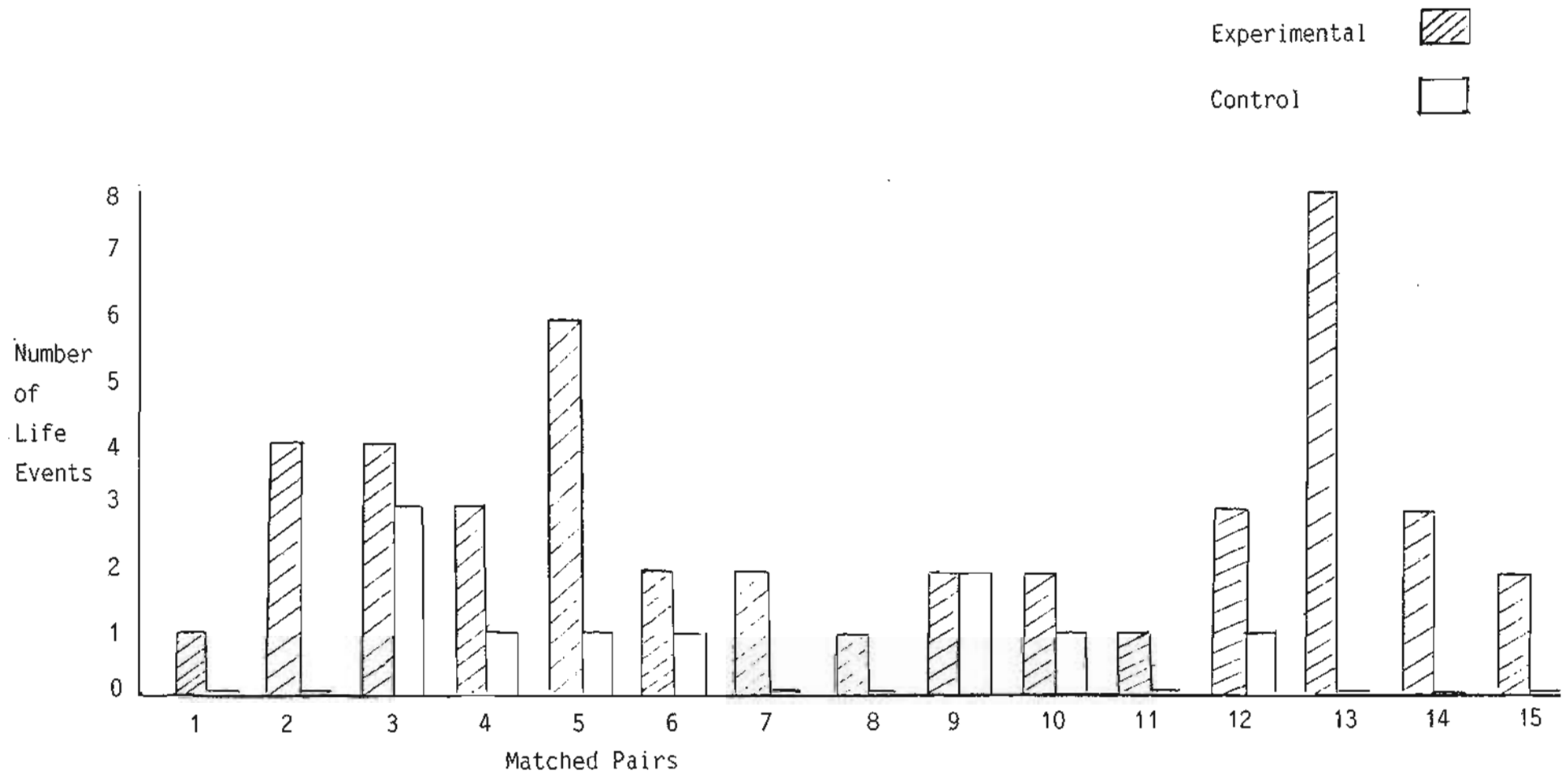


Fig. 9: Histogram Illustrating a Comparison of the Number of Life Events Reported by the Experimental and Control Groups (Matched Pairs)

individual striving, may experience guilt as a result of a perceived notion of not having fulfilled important obligations towards the deceased.

A methodological issue of note that emerged from the present study was the use of frequency analysis of life events versus weighting analysis of life events as a measure of Life Event stress. It is apparent from Fig. 6 (page 46) that the most frequently occurring life events do not necessarily account for the highest life stress. However, it is apparent that cumulative life stress was a significant factor in the present study in that the Experimental group experienced an average of 2.93 life events while the Control group experienced an average of .66 life events over a twelve month period. The cumulative effect of life events is clearly illustrated in Fig. 9.

It follows that one should be wary not to place undue emphasis on a single life event in a consideration of its relationship to the onset of depression.

## 5.2 A COMPARISON OF SOCIAL SUPPORT OF THE EXPERIMENTAL AND CONTROL GROUP

It was hypothesised in Chapter 1 that the Experimental group subjects would differ significantly from matched controls in terms of Social Support. The results presented in Table V (page 47) indicate that the Experimental group experienced less social support than the Control group. However, the high degree of variance in the Experimental group appears to have contributed to the reduction in the confidence level at which this difference could be accepted statistically. Hence hypothesis (3) was rejected. Had the variance of the Experimental group not been significantly greater than the variance of the Control group, the obtained t value would have been considered at 14 df instead of 7 df. This would have resulted in the social support of the two groups being significantly different at the .05 level of confidence. The investigator is therefore of the opinion that with a larger sample, the variance of the Experimental group would, in all likelihood, have been smaller and hence not significantly different from the Control group. This would probably have made for a significant difference in social support between the

Experimental group and Control group.

Nuckolls et al (1972), Wilcox (1979), and Henderson et al (1980) studied the social support buffering hypothesis. In effect this hypothesis states that individuals with low levels of social support in interaction with life events, are more at risk for depression. The findings of the present study lend a measure of support to this buffering hypothesis.

The item analysis in Table V1 and Fig. 7 (page49) indicates that contact with family members is the most discriminating social support item. This is an expected finding since in the Indian community, the family plays a central role around which most activities pivot. The low discriminating value of item 1 (Do you live with your family?) suggests that simply living with one's family does not automatically imply good interpersonal relationships with family members.

### 5.3 A COMPARISON OF RELIGIOUS AFFINITY OF THE EXPERIMENTAL AND CONTROL GROUP

It was hypothesised in Chapter 1 that the Experimental group subjects would differ significantly from matched controls in terms of Religious Affinity. The results presented in Table V11 (page50) indicate that although the Experimental group reported less religious affinity than the Control group the difference between the religious affinity scores of the two groups was not found to be statistically significant. Hence hypothesis (4) was rejected. However, with a larger sample size, it is probable that the difference in religious affinity scores between the Experimental and Control group may turn out to be statistically significant.

The item analysis produced interesting findings. It revealed that both the Experimental and Control group appealed equally frequently to God in their hour of need (item 4). A fair degree of difference existed in the degree of importance they attached to religion (item 1), their feeling of closeness to God (item 2), and their strength of belief in God (item 3). It appears then, that item (4) has no discriminating value and hence seriously reduced the discriminating power of the Religious Affinity Scale. This was verified by an item analysis with item (4) eliminated.

This analysis revealed that the difference between the religious affinity scores of the Experimental and Control group was significant at the .1 level of confidence. Hence an elimination of item (4) from the Religious Affinity Scale seems to be indicated.

## CHAPTER 6

## CONCLUSIONS

In this small sample (N=15) of Indian female depressives and matched community controls, the following hypotheses were stipulated:

1. Experimental group subjects differ significantly from matched Controls in terms of Life Event stress.
2. Experimental group subjects differ significantly from matched Controls in terms of number of Life Events experienced.
3. Experimental group subjects differ significantly from matched Controls in terms of Social Support.
4. Experimental group subjects differ significantly from matched Controls in terms of Religious Affinity.

Hypotheses (1) and (2) were confirmed while hypotheses (3) and (4) received a measure of support. Thus it ensues that Life Events are a critical variable associated with depression, while a definite trend exists for an association between the variables Social Support and Religious Affinity, with Depression.

Issues of cross-cultural significance which emerged were:

1. Nature of Life Events  
Life Events were not characterised by exit events such as death, marital separation, and family member leaving home.
2. Social Support  
Social support centred around the factor of closeness of contact with family members.
3. Religious Affinity  
While religious affinity is not a much researched variable, it was found to be an important variable associated with depression in the population under survey.

The following research possibilities emanate from this study:

1. A study with a similar design as the present study with a larger sample would help to make more conclusive statements regarding certain issues in this study (namely Social Support and Religious Affinity).
2. A study with a similar design could be conducted among other racial groups in order to make local cross-cultural comparisons.
3. The issue of religiosity and its relationship to psychopathology offers tremendous scope in terms of quantitative research.

Therapeutically it is evident that:

1. The issue of loss does not appear to play a central role in the aetiology of depression.
2. Noting the importance of the family oriented nature of social support, family therapy strategies adapted for the Indian population need to be utilised. The emphasis should be towards integrating the individual with his family rather than helping him to individuate and move out of his family unit.
3. While religion is an overtly ignored concept in western psychotherapy, noting the importance of Divine power in the Indian population, therapeutic strategies incorporating a spiritual dimension need to be considered.

The Indian South African is a unique population group having preserved a cultural and traditional lifestyle while living within a western environment. Depression, being of multifactorial aetiology, appears to be increasing within this population. It behoves the therapist to formulate a firm foundation of therapeutic guidelines based on factual understanding of the Indian population if therapy is to achieve a measure of success.

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APPENDIX A

Consent

I,.....hereby declare that I give my permission for the investigation set out below.

I am fully informed by DR. F.B. MANSOOR in respect of the nature and confidentiality of the study mentioned below. I understand and accept that the information collected will be used for research purposes and for publication in scientific journals and for teaching purposes.

The nature of the investigation is:

To assess the following areas involved in the cause of Depression viz. Life Events, Social Support, and Religious Affinity as reflected in the attached questionnaire which you are requested to complete.

The interview will be conducted by: DR. F.B. MANSOOR

My permission is granted of my own free will and I am aware that I can revoke such permission at any time.

SIGNED:

DATE:

.....  
PATIENT

- 1. WITNESS:.....  
Person who informed patient and conducted the interview.
- 2. ....

## APPENDIX B

Biographical Inventory

NAME :

HOSPITAL NO :

ADDRESS :

TELEPHONE :

AGE :

MARITAL STATUS :

EMPLOYMENT :

INCOME :

EDUCATION :

DATE OF ONSET OF ILLNESS :

DATE OF COMMENCEMENT OF TREATMENT :

PREVIOUS ADMISSIONS : YES/NO

PREVIOUS PSYCHIATRIC TREATMENT : YES/NO  
IF YES, WHAT TYPE OF TREATMENT?

APPENDIX C. Social Readjustment Rating Questionnaire - Chohan's Adaptation

Below is a list of 50 Life Events. Next to each one is a line, on one end is Very Stressful and on the other end is Not Stressful. If you have experienced a Life Event within the past twelve months, please mark it on the line to indicate how stressful the event was for you. Example: if it was very stressful to you, then place the mark near Very Stressful. Also indicate approximately when the event occurred. (If instructions are unclear further clarification will be provided by the interviewer.)

ITEM NO.	LIFE EVENT	VERY STRESSFUL	TIME IN MONTHS			
			NOT STRESSFUL	0-3mths	4-6mths	7-9mths
1.	MARRIAGE	_____				
2.	PREGNANCY	_____				
3.	MAJOR CHANGE IN HEALTH OF FAMILY MEMBER	_____				
4.	MARITAL RECONCILIATION	_____				
5.	DEATH OF A CLOSE FRIEND	_____				
6.	MAJOR CHANGE IN NUMBER OF ARGUMENTS WITH SPOUSE	_____				
7.	TROUBLE WITH IN-LAWS	_____				
8.	SON OR DAUGHTER LEAVING HOME	_____				
9.	ENGAGED TO BE MARRIED	_____				
10.	ADDITION OF A NEW FAMILY MEMBER	_____				
11.	TROUBLE WITH CO-WORKER/S	_____				
12.	DEATH OF SPOUSE	_____				
13.	DEATH OF A CLOSE FAMILY MEMBER	_____				
14.	MAJOR PERSONAL INJURY OR ILLNESS	_____				
15.	SEXUAL DIFFICULTIES	_____				
16.	DEATH OF A CLOSE RELATIVE	_____				
17.	MAJOR DECISIONS REGARDING THE FUTURE	_____				
18.	MAJOR CHANGE IN LIVING CONDITIONS	_____				
19.	OUTSTANDING PERSONAL ACHIEVEMENT	_____				
20.	MAJOR CHANGE IN RECREATION	_____				
21.	MAJOR CHANGE IN SLEEPING HABITS	_____				
22.	MAJOR CHANGE IN EATING HABITS	_____				
23.	VACATION	_____				
24.	MAJOR CHANGE IN VIOLATIONS OF THE LAW	_____				
25.	EXTRAMARITAL AFFAIR (SPOUSE)	_____				

ITEM NO.	LIFE EVENT	VERY STRESSFUL	NOT STRESSFUL 0-3mths	4-6mths	7-9mths	10-12mths
26.	EXTRAMARITAL AFFAIR (SELF)					
27.	BUILDING A HOUSE					
28.	MAJOR BUSINESS ADJUSTMENT					
29.	CHANGE IN RESIDENCE					
30.	MINOR VIOLATIONS OF THE LAW					
31.	MAJOR REVISION OF PERSONAL HABITS					
32.	CHANGE IN RELIGIOUS CONVICTIONS					
33.	COURT APPEARANCE					
34.	UNWANTED PREGNANCY					
35.	ACADEMIC/SCHOLASTIC FAILURE					
36.	MENOPAUSE					
37.	MISCARRIAGE OR STILLBIRTH					
38.	MAJOR CHANGE IN THE NUMBER OF FAMILY GET-TOGETHERS					
39.	LOSS OF JOB					
40.	RETIRED FROM WORK					
41.	CHANGE OF JOB					
42.	MAJOR CHANGE IN WORK RESPONSIBILITIES					
43.	TROUBLES WITH BOSS					
44.	MAJOR CHANGE IN HOURS OR CONDITIONS OF WORK					
45.	EMBARKED ON STUDIES					
46.	DIVORCE OR SEPARATION					
47.	JAIL SENTENCE					
48.	MAJOR CHANGE IN FINANCIAL STATE					
49.	MORTGAGE OR LOAN OVER R10 000					
50.	OTHER					



## APPENDIX D

Social Support Scale

Below is a list of questions which indicate how close you are to your family and friends. Next to it are columns marked Yes/No. Read the questions carefully and tick off either Yes or No whichever is applicable. This must be done with every question.

	Yes	No
1. Do you live with your family?		
2. Do you have close contact with family members?		
3. Do you have a confidante-someone you can talk to with ease? It may be a relative or friend.		
4. Do you belong to a social organisation such as women's group; club; voluntary social work?		

## APPENDIX E

Religious Affinity Scale

Below is a list of questions related to religion.

Next to it is a line with the words Very on the left hand side

and Not on the right hand side. Read the questions carefully

and then on the line make a clear mark to indicate what role religion

plays in your life. (If instructions are unclear, further clarification

will be provided by the interviewer).

1. How important is religion in your life?

---

 Very

Not

2. How close do you feel to God?

---

 Very

Not

3. How strong is your belief in God?

---

 Very

Not

4. How often do you appeal to God in your hour of need?

---

 Very

Not

## APPENDIX F

t - Test Analysis of Life Events Data

The formulae used were:

1. Sample Standard Deviation  $s_1 = \sqrt{\frac{\sum X^2}{n}}$

where  $\sum X^2$  is  $= \sum X^2 - \frac{(\sum X)^2}{n}$

and  $n$  = number of values in the sample

2. Standard Error of the Sample Mean  $S\bar{X}_1 = \frac{s_1}{\sqrt{n-1}}$

3. The t Distribution  $Z = \frac{D\bar{X}}{S_{D\bar{X}}}$   
 $= \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{(S\bar{X}_1)^2 + (S\bar{X}_2)^2}}$

4. Degrees of Freedom  $df = n - 1$

Example of t - Test Analysis:

Values of X (Exp.)	$X^2$
9.8	96.04
27.4	750.76
36.5	1332.25
29.0	841.00
51.1	2611.21
13.4	179.56
17.9	320.41
9.2	84.64
17.9	320.41
14.9	222.00
20.0	400.00
10.0	100.0
23.0	529.00
73.0	5329.00
29.0	841.00
<hr/>	<hr/>
$\sum X = 382$	$\sum X^2 = 13957.28$

$\bar{X}_1 = 25.46$

$(\sum X)^2 = 145924$

$n = 15$

$$X^2 = 13957 - \frac{145924}{15}$$

$$X^2 = 4229$$

$$s_1 = \sqrt{\frac{4229}{15}}$$

$$s_1 = 16.7$$

$$S\bar{x}_1 = \frac{16.7}{\sqrt{14}}$$

$$= 4.46$$

Values of X (Cont.)

	$X^2$
10.	100.
0.2	0.04
5.8	33.64
4.9	24.01
3.6	12.96
13.0	169.00
16.4	268.96
4.7	22.09
0.00	-
0.00	-
0.00	-
0.00	-
0.00	-
0.00	-
0.00	-
0.00	-
$\sum X = 58.6$	$\sum(X^2) = 630.65$
$\bar{X}_2 = 3.90$	
$(\sum X)^2 = 3433.96$	
$n = 15$	

$$X^2 = 630.65 - \frac{3433.96}{15}$$

$$X^2 = 402.68$$

$$s_2 = \sqrt{\frac{403}{15}}$$

$$s_2 = 5.18$$

$$S\bar{x}_2 = \frac{5.2}{\sqrt{14}}$$

$$S\bar{x}_2 = 1.39$$

t Distribution

$$\begin{aligned}
 \text{t Value} \quad Z &= \frac{25.46 - 3.90}{\sqrt{(4.46)^2 + (1.39)^2}} \\
 &= \frac{21.56}{\sqrt{21.8}} \\
 &= 4.62
 \end{aligned}$$

For 14 df a t value of 1.76 would be required to produce a significant difference at the .05 level of confidence. Since the obtained t value ( $t > 4.62$ ) was greater than 1.76, the difference between  $\bar{X}_1$  and  $\bar{X}_2$  was regarded as being significantly different at the .001 level of confidence.

(ref:

Edwards AL. Statistical Methods. 3rd ed. Seattle, Washington: Holt, Rinehart and Winston, 1972).