DISCUSSION

The results presented in the previous chapter are discussed, keeping in view the specific objectives of the study, in relation to the findings obtained in previous research. Negative findings and certain methodological aspects specific to this study will be highlighted. The clinical implications of the findings and its relevance in the Indian context will be the backdrop for the discussion.

The discussion is presented under the following headings:

- Demographic and clinical description of the sample
- Stressful life events
- Personality
- Coping behaviour
- Tools developed
- Implications of the study
- Limitations of the study
- Suggestions for future research.
SOCIO-DEMOGRAPHIC AND CLINICAL DESCRIPTION OF THE SAMPLE

Table 1 depicts the socio-demographic characteristics of the sample. The individual matching procedure resulted in the two groups being closely comparable on a range of socio-demographic factors. Equal sex representation was present in both the groups.

Although 20-40 years was chosen as the age span, majority of the patients were in the age group of 20-30 years with a mean age of approximately 28 years (27.59 ± 5.75). The women, on the average, tended to be a year younger. The normal subjects were individually matched on this factor. Incidence of neurosis predominates in the second and third decade of life and as only fresh cases reporting their first episode of illness were taken, the age span had a tendency to be self-restricting.

With regard to education, the neurotics and normals did not differ and had around 12-13 years of education (12.70 ± 2.55, 12.67 ± 2.52 respectively). However, sex differences were significant. Men had more years of education (13.49 years ± 2.50) than women (11.89 ± 2.31), the difference being statistically significant (t = 3.65, p < .01). The inclusion criteria specified a minimum of 10 years of schooling and most of the women had completed their school-leaving certificate examination, a pre-university course or
a one year diploma course. Men, on the other hand, tended to be graduates or professional degree holders. Effects of education on other variables to be studied will, therefore, be kept in mind.

Group differences were absent in the case of occupational status. Most of the men were either employed or studying, while approximately 48 per cent of the women were non-wage earners engaged in household work as housewives (36.7 per cent) or otherwise (11.65 per cent). Majority reported an income of less than Rs.1000/-. However, in India, income has not been found to a reliable index of social class. Incomes tend to be under reported as governmental benefits accrue to persons of lower economic strata.

In the category of marital status, 'single' refers to never-married status with the exception of 1 female neurotic who was a divorcee. Two neurotic subjects and 2 normals who were engaged-to-be-married were subsumed under the 'married' category for purposes of analysis. Age and marital status are certainly correlated variables, in the sense that young persons are most likely to be single, the middle aged married and the older more likely to be widowed (Henderson, Byrne and Duncan-Jones, 1981). In India, as compared to the Western countries, marriage takes place at a younger age. The fact that there were more 'married' as compared to 'single' persons, and more women were married as compared to men, is not surprising. Group and sex difference were not significant.
About 83 to 86 per cent of the subjects in both groups were Hindus by religion, the 'other' category comprising of Muslims and Christians. Approximately 68 to 77 per cent of the subjects hailed from nuclear families, a trend in keeping with urbanization. Thirteen per cent (N = 8) belonged to extended families, consisting of significant elders, and were subsumed under the joint family category.

The selection criteria and individual matching procedure resulted in the sample being appropriate for the objectives of the study. The subjects were young men and women hailing from urban nuclear families, with an average of 12 years of formal education and likely to be employed.

Clinical characteristics of the neurotic group are presented in Table 2. Anxiety state was the most frequent diagnosis, followed by neurotic depression. Nine out of the 10 cases diagnosed as hysteria were women. The dominance of anxiety state may be due to the fact that it appears at a slightly younger age than depression. Majority of the patients (72 per cent) reported the presence of a precipitating factor, while, an acute onset of illness was reported by 53 per cent. Most of the patients perceived their illness to be progressive or status quo in course.

All the patients included for the study were fresh cases and the mean duration of illness was around 6 months (5.72 ± 3.67), well within the inclusion criteria of 'one year or less'. The shortest period of illness was 15 days
and the longest 12 months. Subjects with a clearly specifiable onset of illness were included and the information on their clinical characteristics collected from the case sheet as recorded by the psychiatry resident. Cross-checks, when necessary, were done at the end of the interview so as to avoid contamination of information obtained on life events and coping behaviours.

**STRESSFUL LIFE EVENTS**

Table 3 gives the mean number of stressful life events and the mean subjective distress scores experienced by neurotics and normals. Significant differences on both these measures were present and this is graphically depicted in Fig. 1. Higher life event stress scores in patients displaying symptoms of anxiety, depression and other neurotic symptoms were also reported by Uhlenhuth and Paykel (1973, 1973a) in a time span of one year. Surtees and Ingham (1980) reported that the number of life events experienced differentiated 'well' from 'ill' patients. Neurotic depressive patients had significantly more life events than normal controls in a study by Roy et al. (1985). Higher incidence of life events among psychiatric patients have been reported by Dekker and Webb (1974), Panocheri, Biondi and Mosticconi (1980) and Schless et al. (1977). In India, greater number of life events in neurotics and other psychological ill groups

Statistical significance, however, does not necessarily mean clinical significance. Even though the group means differ significantly in statistical terms, both groups have experienced approximately only one stressful life event in the one year period. So clinically speaking, the difference is not alarming. Negative findings with regard to occurrence of life events in patients and normal subjects have been reported by numerous other researchers (Aponte and Miller, 1972; Clum, 1976; Goldberg and Comstock, 1976; Mueller, Edward and Yarvis, 1977; Schless et al., 1977a). In India, no significant difference between patient and control groups were reported by Radhakrishnan, Joseph and Verghese (1984) and Venkoba Rao and Nammalvar (1976).

The mean number of life events experienced in one year reported in this study (1.33 ± 1.02 for neurotics and 0.98 ± 0.79 for normals, p < .05) is less than the figures reported by Singh, Kaur and Kaur (1981) in India and other researchers in the West. This may be because a specific attempt was made at the time of tool development, to exclude items which may be reflections of or caused by illness factors. Earlier life event scales have been criticised for items being contaminated by illness variables, which tended to increase the number of
life events reported (Lehman, 1978). Some researchers (Goldberg and Comstock, 1976), therefore, have even questioned the so-called 'positive findings' or higher life event scores obtained in studies using such tools.

Certain other methodological issues have to be borne in mind when interpreting the results of the present study. Schless et al. (1977) postulated that therapy and history taking in psychiatric patients may sensitize them to their personal life histories and make them report more life events. Others (Brown, 1974) have felt that there is a definite 'effort after meaning' in patients to explain their illness. Since no details of the study were provided prior to the completion of interviews, and as patients were screened by a resident focusing entirely on symptoms and signs of the illness, the possibility of such a bias was minimised. Moreover, none of the patients had received professional help earlier and undergone any kind of counselling or psychotherapy. This may have also contributed to the low number of life events reported by patients. An additional precaution taken was to exclude the period of illness (reported independently by the patient) from the 2 year period for which reporting of life events was undertaken. Since the patients were not aware of such an analysis, no bias could have operated. Besides, the time span was kept comparable in each individually, matched normal subject, thereby controlling for 'fall-off' in reporting of life events (Punch and Marshall, 1985). In reporting of events
there tend to be more errors of omission than commission
(Horowitz et al., 1977; Mendels and Weinstein, 1972), and this
would have operated equally for both groups. The findings of
this study are, therefore, to be interpreted keeping those
issues in mind. Although, no attempt at developing an etio-
logical model is being made in the present study, other studies
have been criticized for treating the existence of associations
in cross-sectional studies as evidence of causality (Rabkin
and Struening, 1976). However, on the whole, it appears that
the occurrence of life events alone may be insufficient to
explain the difference between neurotics and normals.

With regard to the mean subjective distress experienced
in relation to stressful life events, neurotics and normals
differed significantly from each other (p < .01). Neurotics
experienced almost two and a half times the distress experienced
by normals in a comparable period. While the distress experi-
enced by normals is in the 'slight' to 'moderate' range
(Mean = 1.37 ± 1.45), for the neurotics it is in the 'severe'
to 'very severe' range (Mean = 3.35 ± 2.75). Significant
differences in the perception of stressful life events between
a psychologically ill and control group were observed by Naidu
and Venkataramaiah (1984). Schless et al. (1977) observed that
patients suffering from neurotic depression viewed life events
as uniformly more stressful than a comparison group of non-
depressed subjects, while Tennant and Andrews (1978) found that
the total number of life events did not exhibit a relationship
with neurotic impairment, independent of the distress score. Thus, it was the distressing quality of life events, and not merely the life change they caused, that was associated with neurotic impairment. A methodological study of the subjective rating of distress was undertaken by Ndetei and Vadher (1981). They concluded that patients did not overrate threat due to events and controls did not underrate threat. These ratings may, therefore, be taken as 'true' values indicating actual differences in distress.

The use of normative weighted stress scores, as initially suggested by Holmes and Rahe (1967), have been advocated by many researchers in contrast to the subjective weighting of distress (Dohrenwend et al., 1978; Horowitz et al., 1977; Paykel, Prusoff and Uhlénhuth, 1971). Dohrenwend and Dohrenwend (1974) have argued that subjective weights are not 'clean measures' of life event stress, but confounded by other factors such as an individual's personality and past experience. A major criticism against the normative method has been that the weighted scores have not been derived from randomly selected, representative samples, but often from samples of convenience: students, hospital personnel etc. This casts some doubt on the validity of extrapolating these values to other samples of individuals. Moreover, socio-cultural heterogeneity in samples may further diminish this validity (Ross and Mirowsky, 1979). Normative weighted scores, therefore, pose a special problem in a country like India, known for its socio-cultural diversity.
The importance of assessing the idiosyncratic interpretation of the impact of life events on the individual has been a recurrent theme in recent literature (Antonovsky, 1973; Byrne and Whyte, 1980; Dressler, Donovan and Geller, 1976; Gersten et al., 1974; Hurst, 1979; Mueller, Edward and Yarvis, 1978; Rabkin and Struening, 1976; Redfield and Stone, 1979; Zimmerman, 1983). Following an extensive review of literature, Rabkin and Struening (1976) commented that in quantifying the stressfulness of emotional conditions "it was essential to assess the perception by the individual that such conditions are stressful". Similarly, Dressler, Donovan and Geller (1976) commented that an "event viewed by one person as an inconvenience may be experienced by another as a catastrophe" and Hudgens, Robins and Delong (1970) stated that what is stressful for one person may be of little consequence to another. An analysis of feelings and emotional responses to events while difficult to quantify may have relevance to the study of the relationship of life events to disorder (Patrick, Dunner and Fieve, 1978). Evidence in support of this argument can also be found in experimental psychology. Lazarus (1966) found that stress was not so much a function of the nature of the environmental stimulus as it was of the individual's interpretation of the personal significance of the stimulus. The clinical implications of subjective impact of life events has been commented on by Skinner and Lei (1980). In addition, Rahe and Arthur (1978) stated that subjective stress units represent both perception of the
intensity of life change as well as some approximation of the success of one's defenses and coping in dealing with the event. Dohrenwend (1979) voiced that this measure reflects the subjects' sense of personal vulnerability to each event and may also reflect a response style. It follows from these arguments that personality and other factors determine the impact of life events for any given individual and, therefore, much useful information would be lost if only normative weights are applied.

The emphasis in the present study was on understanding the phenomena as experienced by the individual. Subjective ratings are, therefore, closer to the actual experience of the respondent (Sarason, Johnson and Siegel, 1978). Moreover, these ratings can probably throw light on which stressful life events increase the vulnerability of certain individuals. However, it must be remembered that the study is a retrospective one, and it is likely that the current psychiatric status of the patient group 'coloured' their perception of events. In order to reduce and, if possible, control for this effect, the subjects had been asked to concentrate on reporting their feelings as they felt at the time of occurrence of the life event and not on the residual impact at the time of the interview.

The Pearson product-moment correlation 'r' between stressful life events and subjective distress was 0.88 for neurotics and 0.54 for normals, the difference being
statistically significant \((t = 4.17, p < .01)\). A large number of researchers have argued that a simple, additive count of life events is as good as any weighted method. However, others (Henderson, Byrne and Duncan-Jones, 1981) have felt that it is premature to resort to this method alone. In group differences in perception, such as that seen in neurotics and normals, a simple frequency count of events may provide an inadequate index of exposure to adversity. Others have felt that the simple count method may be used when a large number of subjects have to be screened for exposure to life events or a quick estimate of life events experienced is needed. However, more clinically useful information may be gained in recording both the frequency count and the subjective impact of life events.

The influence of demographic factors on stressful life events is presented in Table 4. Socio-demographic factors have been shown to affect the experience of life events (Goldberg and Comstock, 1980; Kellam, 1974; Kessler, 1979; 1979a; Masuda and Holmes, 1978; Rabkin and Struening, 1976). Gender, age and education did not influence the experiencing of life events or subjective distress in the present study. Schless et al. (1974) demonstrated that exposure to life events was independent of demographic variables. Similar findings in India have been reported by Singh, Kaur and Kaur (1981).

In the present study, sex differences did not influence the reported frequency of stressful life events or the degree
of subjective distress. The relationship between sex differences and life event experienced has not received much attention (Webb, Snodgrass, Thagard, 1978). Conflicting results have been reported by some studies; Dohrenwend (1973) and Pearlin and Schooler (1978) have claimed higher change scores for women than men. Billings and Moos (1982) and Horowitz et al. (1977) reported that women tend to rate events as more stressful than men. Others (Dekker and Webb, 1974; Goldberg and Comstock, 1980) found no sex differences. Webb, Snodgrass and Thagard (1978) found no sex differences in life change scores, but on types of events. Masuda and Holmes (1978) stated that sex as a factor determining stressful life events and subjective distress was 'ambiguous'. The issue of gender differences in mental health is a much disputed one (Dohrenwend and Dohrenwend, 1974). Studies document the fact that more women suffer from depression and other affective symptoms and tend to utilize health facilities more frequently than men (Weissman and Klerman, 1977). This would lead one to expect greater levels of distress in relation to life events to be reported by women. Moreover, sex-role stereotypes of the emotionally volatile woman and the strong silent man further reinforce this. Kessler and McRae (1981), however, in a review of trends in the relationship between sex and psychological distress stated that role changes experienced by women in the past two decades may have helped close the male-female gap largely by increasing the distress of men rather than decreasing it for women. The fact that a large number of women in the present
sample were working and wage earners in their own right may have contributed to the absence of sex differences.

Age differences were studied in the sample by dividing them into 2 groups on the basis of the median value of 27 years. The younger age group comprised of persons aged 27 years and younger, while those older than 27 years formed the older age group. Age as a variable did not significantly influence the experience of life events and distress as indicated by the mean values. The decreasing occurrence of life events with increasing age has been noted (Henderson, Byrne and Duncan-Jones, 1981). Chiriboga and Dean (1977) and Uhlenhuth and Paykel (1973a) have reported that persons younger in age report more events, while Timmreck, Braza and Mitchell (1980) found no relationship between stress and age. However, the life span carries with it a certain amount of transition which is bound to result in certain life experiences. Therefore, even if the quantity of life events experienced is not different at different age levels one would expect the quality of life experiences to be influenced by age. This has been reported by Henderson, Byrne and Duncan-Jones (1981) and Timmreck, Braza and Mitchell (1980). In India, increase in life events with age was reported by Harini Kumari and Jai Prakash (1986). However, in the present study, the age range was restricted to a span of twenty years from 20-40 years as compared with other studies covering almost 6 or more decades. This may have resulted in the negative findings obtained in this study.
The influence of education on experience of life events and distress was studied by dividing the subjects into two groups on the basis of the median of 12 years of education. Persons having 12 years or less of formal education formed one group and those with higher education of more than 12 years the second. Social class indices are usually evaluated on the basis of education and income. A trend for frequencies of life events and subjective distress to increase with education was reported by Dekker and Webb (1974), Henderson, Byrne and Duncan-Jones (1981) and Uhlenhuth and Paykel (1973). Contrary findings were reported by Dohrenwend (1973) and Dohrenwend and Crandell (1970). Masuda and Holmes (1978) refer to the association between social class and life experiences as 'cloudy'. In the present study years of education did not influence the experience of stressful life events or subjective distress. It must be recalled, however, that sex differences influenced education significantly with the women being less educated (Table 1). In addition, the inclusion criteria of a minimum of 10 years of education excluded the population falling below this level. Educational levels differ markedly in India and deserve more attention.

With reference to marital status, the married experience significantly more life events than the single (p < .05). However, the two groups did not differ with regard to subjective distress. An important issue arises here; does the marital relationship provide the support necessary to face life events
so that, even though the married experience more events than single persons, they report less subjective distress. This needs to be further examined. However, more life events in the single have been reported by Henderson, Byrne and Duncan-Jones (1981) and Uhlenhuth et al. (1974). In the present study, even though there was a statistically significant difference between the two groups, they actually experienced approximately one event each. The quality or type of life events experienced by the two groups could also be studied.

Socio-demographic differences in reporting life events are important as they reflect real differences in the extent to which various groups in the population encounter life experiences (Kallam, 1974). Moreover, such differences throw light on those groups most at risk for encountering life experiences of a potentially, noxious quality. In the present study, socio-demographic factors did not emerge as significant, in keeping with the findings of Singh, Kaur and Kaur (1981). However, in evaluating the findings of this study, it must be remembered that the present sample was kept as homogenous as possible in order to control, to some extent, the influence of these demographic factors. In addition, special care was taken at the time of test development, to make the items specific and relevant for the population under study. It has been argued that social differences reported to date, may be due to the fact that life event inventories are not universally
applicable to all groups in the population. An inventory incorporating the range of life experiences particular to one segment of the population may seriously ignore the kind of events that befall another group (Henderson, Byrne and Duncan-Jones, 1981). In a country, like India, where social class disparities are marked, further work needs to be undertaken with large samples (to include persons of diverse socio-demographic backgrounds) and an universe of items that allows individuals to describe their personal experiences adequately.

Distribution of neurotics and normals in terms of the number of stressful life events experienced is given in Table 5. Although no differences were statistically significant, two important trends were noticed. A larger number of normal subjects (28 per cent) did not experience any stressful life event as compared to neurotics (18 per cent). The converse was true for multiple events; more number of neurotics reported experiencing 3 or more stressful life events (13 per cent) in comparison with normal subjects (3 per cent). In the recording of events, care was taken to ensure that related events with one cause were not recorded twice. For example, if the events 'asked to vacate' and 'moved house' were reported by the respondent, these were clubbed together and the respondent asked to report distress. This was done to avoid spuriously increasing the number of life events reported. Benjaminsen (1981) found that significantly more neurotics than non-neurotic depressives had suffered multiple stressful events.
However, he noticed that these multiple events were related and usually involved a single calamity. In India, Chatterjee, Mukherjee and Nandi (1981) observed that depressives experienced a greater number of clusters of events (3 or more) than normal subjects. Myers, Lindenthal and Pepper (1975) reported that those who displayed significant symptoms, but reported few life events were found to be less well-integrated than those who reported few symptoms but many events. High stress and low illness was noticed in hardy persons by Kobasa (1979). Rahe, Fløistad, Bergan, Ringdal, Gerhardt and Gunderson (1974) proposed that subjects' coping styles may help in understanding how some people with high stress manage to remain in good health. Cobb (1974) commented on the role of denial in recalling life events noting that, whether as a personality trait or as a response to an environmental situation, denial may act to reduce recall and reporting of life events. The absence of life events may, therefore, be a result of such denial. Henderson, Byrne and Duncan-Jones (1981) have speculated whether a 'plaintive set' operates in certain individuals. Such persons would seize an opportunity to complain. Life event inventories may provide such an opportunity and reports of excessive frequencies of life events may be little more than attempts by some individuals to proclaim how badly the world has treated them. However, both these concepts need to be examined in greater detail.
Table 6 indicates the frequencies of stressful life events experienced by neurotics and normals, one year prior to onset of illness in the case of neurotics and in a comparable period for normals. The results are graphically portrayed in Fig. 2. What emerges quite clearly is that there is a consistency in event reporting in neurotics and normals, except in the 2 months prior to onset of illness in the case of neurotics. In this time period, a peaking of events is noticed for neurotics which is approximately $2\frac{1}{2}$ times that of the normals. The interview and analysis procedure adopted reduced the possibility of neurotics reporting more events prior to onset of illness. Peaking of events before illness-onset in patient groups have been reported by other researchers although the time span varies. Paykel, Frusoff and Myers (1975) reported a mild peaking in the case of depressive subjects in the month before onset of illness. Significantly more events in neurotic patients, 3 months prior to onset of illness was reported by Cooper and Sylph (1973), while Brugha and Conroy (1985) and McKeon, Roa and Mann (1984) reported a 6 month period and Fontana et al. (1972) a dramatic rise in events in the preceding year. The excess of events spanned shorter duration (3 weeks) in studies of Brown, Harris and Peto (1973) and Surtees et al. (1986). A study in India reported a clustering of events in the 2 year preceding the onset of illness (Venkoba Rao and Nammalvar, 1976). An interesting observation by Harder et al. (1980) was that neurotic symptomatology was related to a high level of life
events 7 to 12 months prior to admission. While neurotic symptoms seem to appear soon after some precipitating events, they are tolerated for many months before their presence contributes to a medical/psychiatric consultation. A possibility of such a long gestation period for neurotic symptoms is suggested by the data in this study too. There is a peaking of events before the onset of illness, yet the average time elapsing before a professional consultation is sought is 6 months (Table 2).

Another observation with regard to this data is that there does not seem to be a 'fall off' or decline in reporting of events as the time elapses (Funch and Marshall, 1985). This temporal consistency in reporting has been observed by Billings and Moos (1982). Factors affecting recall and reporting of events have been a troublesome methodological aspect of life event research. Brown (1974) has discussed, at length, sources of contamination in the recall of life events. Jenkins, Hurst and Rose (1979) have reported decreases in event reporting almost as much as 34-46 per cent in a 9 month time span. However, Paykel (1983) claimed that such alarmingly high rates of forgetting are partly due to the use of unsupervised questioning in data collection. He reported a 9 per cent 'failure to recall' rate over 6 months, when data was collected by interview. However, careful attention to methods of data collection can raise this reliability to within acceptable limits. The procedure
adopted in this study of systematic interviewing with standard probes and events arranged in logical sets to prime memory (Horowitz et al., 1977) may have helped to produce a consistent reporting. Besides, the fact that equal durations of reporting were deleted in each matched pair of neurotics and normals ensured that such errors would affect both groups equally. Mendels and Weinstein (1972) have stated that where time influenced the recall of life events it was by way of forgetting trivial events and not major ones, and certainly not in the fabrication of unoccurred events.

Events grouped by area of activity and the number of individuals reporting at least one event in each category are presented in Table 7. The actual frequencies of each event in the 2 groups and the mean distress are provided in Table 7a. The stressful life events inventory covered 8 categories of events: work, education, marital, family, financial, health, bereavement and legal. More neurotics than normals reported life events in the area of bereavement (p < .05) while groups did not differ with regard to the other categories of events.

The most frequently reported item in the area of bereavement by neurotics and normals was that of 'death of family member' while 'death of close friend' was reported by neurotics only. It is also interesting to note that neurotics report a severe distress in response to death of friend, while normals report such distress for death of family member. 'Death of parent' was reported by only one
neurotic subject and was associated with maximum distress. Death of spouse rated in other studies as the most distressing event (Holmes and Rahe, 1967) was absent in the present study, probably because of the younger age of the sample. Normatively, widowhood is associated with older age (Henderson, Byrne and Duncan-Jones, 1981).

Although, differences in other categories are not significant, events occurring in at least 5 per cent (N = 3) of any one group, and events that aroused maximum distress (rating of 4) will be briefly discussed. In the area of family-related events, 'arrival of new member in household' and 'moved house' were reported with equal frequency by neurotics and normals. In both cases, the subjective distress reported was greater in the neurotic group. However, the event 'family member moved out' was reported more often by the neurotics and, on the average, was associated with severe distress (mean = 3.20 ± 0.45). In the area of work-related events, neurotics reported the item 'transferred' more often than normals and experienced a greater subjective distress. Normals reported events such as 'changed jobs' (in all instances for better prospects) and 'started own business/professional practice' more frequently than neurotics. One normal subject reported the event 'laid off' with very severe distress. In the marital category, the item 'got married, arranged with consent' was more often reported by the neurotic subjects and was associated with
severe distress (Mean = 3.2 ± 0.96). In addition, one neurotic subject reported a broken engagement with maximal distress.

In the education-related events, more neurotics experienced the events 'failed examination' and 'appeared for examination' while normals reported the item 'resumed studies'. Under financial-related events more number of neurotics reported the event 'borrowed money from authorised source' and more number of normals reported the item 'lent money'. Moreover, two neurotic subjects experienced the item 'loss/failure in business' associated with very severe distress.

In the health category, 'minor physical illness requiring consultation/few days off work' was reported by normals alone. This was invariably a common cough or cold and not very distressing. The events 'major surgical operation' (hysterectomy) and 'miscarriage' were reported by one neurotic subject each and were experienced as very severely distressing. It is also interesting to note that of the eight individuals reporting a health-related event, only one was male. One neurotic subject reported a legal event of 'physical assault' experienced as arousing maximum distress.

A pattern seems to emerge in the above listing of events. The neurotics report events which are inevitable losses, which they are unlikely to have brought about such as
bereavement, or events which they may have contributed to a greater or lesser extent such as 'family member moved out', 'failed examination' or 'borrowed money'. Normals on the other hand, appear to experience events which indicate a certain degree of initiative and independence on their part; for example, changing jobs to better prospects, starting own business and resuming studies. To some extent, the normal subjects may be responsible in making these events happen. Zautra and Reich (1980) refer to views of events and people in this light as the 'passive recipient' and the 'active creator'. Fontana et al. (1972) reported that most events in patients' lives are a result of some action on their part rather than events beyond their control. While it could be criticised that items in the SLEI are not totally independent, but person-related such events throw light on the interesting variance of the person-situation interaction (Perkins, 1982).

In the conceptual framework of Dohrenwend (1973, 1974) events experienced by neurotics do seem to be more of 'losses', while in the case of normals there are more 'gains'. It is interesting to note, however, that in the present study although neurotics experienced events such as 'family member moved in' and 'got married' which would be termed as 'gains' or 'entrance' events by Paykel et al. (1969), they experienced a greater subjective distress for these events. Paykel et al. (1969) observed that while 'entrances' in the social field occurred with equal frequency in depressives and normals,
'exits' were more in depressives, which seems to be the pattern in the present study too. Matussek and Neuner (1981) reported that 'loss' events involving death or separation from important family members were more frequently experienced by the neurotic depressives before the onset of the illness. Severe loss was a causal agent for the onset of depressive states and severe loss and danger in the cases of mixed anxiety and depressive states in a study by Finlay-Jones and Brown (1981).

A number of other studies have reported different categories of events to be significant in patient groups. Chiriboga and Dean (1978) reported that, in women, events in the area of interpersonal stress were more frequent, while in men it was legal events. A trend for women to report more negative experience in the areas of interpersonal, supportive and appreciative relationships, while men in matters related to income was observed by Otto (1979). Qualitatively different life events were experienced by older people involving loss of spouse or close family member and altered financial status in a study by Timmreck, Braza and Mitchell (1980). Stewart and Salt (1981) observed that work stress, associated with physical illness, was common in working women, while family strains, associated with depression, more frequent in housewives. Bidzinska (1984) reported that events significantly more frequent in patients with affective disorder were marital and family conflicts, health problems,
emotional and ambitious failures, lack of success and work overload. Although similar events such as absence of spouse, social isolation, financial stress and chronic health problems were reported by Newmann (1986), they did not have a greater impact on depressive syndrome levels.

Cooper and Sylph (1973) found that 'unexpected crises' and 'failure to achieve various life goals' were more frequent in the neurotic group. More events in the interpersonal sphere in depressives and work and performance related events in anxiety disorders were reported by Barrett (1979). Differential effects of different areas of stress (symptom patterns have been observed by Hurst, Jenkins and Rose (1978) and Skinner and Lei (1980). In India, not many researches have been undertaken to study this aspect. Prakash, Trivedi and Sethi (1980) in a comparative study of depressives and schizophrenics found no difference in the pattern of life events, except that educational life events were more frequent in schizophrenics over a one year period. Bhatti and Channabasavanna (1985) reported stress in the area of education to be related to a diagnosis of hysterical or anxiety neurosis and bereavement to be associated with depression.

The results of the present study are, therefore, in keeping with the general trends reported in life event literature. Further research in this aspect is needed to identify events which are likely to be stress-provoking and
illness related. Items such as 'got married/arranged with consent' are peculiar to the Indian context. Changing social values and practices with increasing urbanization and 'westernization' may make such items more 'stress inducing'. Stresses where individual values clash with that of the society can be especially stressful and need to be explored. However, the observation by Paykel et al. (1969) is as relevant today as it was then; the fact that majority of the events reported are in the range of everyday experience, rather than catastrophic and are usually negotiated without manifest symptoms needs to be kept in mind. Moreover, most of the events are normative, that is, expected to occur at a particular point in the life span (such as marriage) rather than non-normative or those occurring out of context. Event occurrence alone, therefore, does not seem to determine the development of illness, but its interaction with other factors such as personality and coping may be crucial.

Tables 8 and 9 depict the various perception dimensions of stressful life events - the number of individuals reporting and the mean subjective distress aroused. Table 8 indicates that dimensions of expectancy and novelty were experienced by, more or less, equal number of individuals, while significant differences were seen in the dimensions of controllability and desirability. More neurotic subjects perceived events to be beyond their control (p < .05) and negative or undesirable (p < .01), while more number of normal subjects reported the
experience of positive events ($p < .05$).

Numerous studies have been conducted in the West with regard to the dimensions of events. Greater number of undesirable events, that is those negative in valence, in patient groups have been reported (Benjaminsen, 1981; Cohen et al., 1984; Crandall and Lehman, 1977; Lakey and Heller, 1985; Mueller, Edward and Yarvis, 1978; Roy et al., 1985; Vinokur and Selzer, 1975; Zautra and Simons, 1979). Events with a threatening quality were reported more frequently by depressives (Brown and Harris, 1978; Brown, Harris and Peto, 1973; Surtees et al., 1986).

A greater number of undesirable and uncontrollable events in patients have been reported by Grant et al. (1981), McFarlane et al. (1983) and Monroe et al. (1983) and uncontrollable events alone by Wilcox (1979). In addition to the above two dimensions, a third dimension of unanticipated events has also been found to be important (Hart, 1979; Hussaini and Neff, 1980; Matheny and Cupp, 1983). Subtle variations with regard to the dimension of controllability have been observed. On the one hand, undesirable events within the subjects' control were found to be more significant and associated with illness (Fairbank and Hough, 1979; Hammen and Mayol, 1982) while, on the other, a stronger relationship with illness has been demonstrated by undesirable events of uncertain controllability (Suls and Mullen, 1981). Perception of control did not yield a strong personal expectancy effect in a study by Dohrenwend and Martin (1979).
These studies have shown quite definitively that perceived dimensions of events are important aspects that contribute to the distressing quality of life events. It is not the event, per se, which is of importance, but the manner in which it is perceived. This also brings out clearly that the same events may be perceived differentially by different individuals or groups of individuals and uniformly assigning certain weights as in normative weights, overlooks this aspect. These perceived dimensions of events take place in the process that Lazarus (1966) referred to as primary appraisal, wherein a stressful situation is cognitively evaluated in terms of what is at stake.

The finding that more normals experienced positive events is in keeping with the findings of Zautra and Simons (1979). The researchers observed that positive events were associated with positive adjustment, and the absence of positive events with a high service utilization rate. Kanner, Kafry and Pines (1973) postulated that the absence of positive conditions and the presence of negative conditions are both substantial sources of stress which are independent of each other. This was further corroborated in a study by Zautra and Reich (1980) who reported that positive events (especially those under personal control) led to reports of greater well-being. In this regard, the presence of a larger number of positive events in the normal subjects and that of a greater number of negative events with a comparatively small number of
positive events in the neurotic subjects is noteworthy. Positive events play an important role in the stress-illness process; longitudinal studies of neurotic disorders in the community have indicated that positive events can neutralize the impact of an earlier negative event and cause remission of the disorder (Parker, Holmes and Maniovasagar, 1986; Tannant, Babbington and Hurry, 1981). Researchers have also referred to the dimensions of events and the role they play in influencing the course and outcome of disorder (Billings and Moos, 1982; Pilkonis, Imber and Rubinsky, 1984). Controlling for the influence of life events has been a problem confounding research in the evaluation of the outcome of psychotherapy.

Looking at the mean distress scores of the perceived dimensions (Table 9) one finds that with the exception of events perceived as neutral in valence, all other dimensions differentiate neurotics from normals; in terms of the mean distress they arouse. In all cases, distress aroused in neurotics is significantly more than that of normals. This is in keeping with the findings of the studies cited earlier. Patients tend to report greater distress especially in relation to events perceived as undesirable and uncontrollable. The finding that even events perceived as positive in valence arouse greater subjective distress in neurotics as compared to normals needs to be examined further. Matheny and Cupp (1983) found that desirable events in women were positively
related to illness. Whether personality or illness factors predispose patients to perceive all events in a negative fashion, for example, as stated in Becks' (1967) cognitive triad or whether actual differences in the quality of life events perceived by neurotics and normals exist, remains to be conclusively proved. Taking mean distress scores within groups, it is observed that for both neurotics and normals events perceived as unexpected, novel, beyond control and negative are rated as more distressing than events perceived as expected, recurrent, within control and positive. This is in keeping with the findings of Hart (1979), Hussaini and Neff (1980) and Matheny and Cupp (1983) that unanticipated (here referred to as unexpected), undesirable (negative) and uncontrollable events are more stressful.

The combined effects of these dimensions were further explored (Table 10). Events perceived as neutral were excluded as they did not differentiate the two groups. Out of 16 possible combinations of dimensions, 4 were not rated by the subjects, data for the remaining 12 are presented.

Greater number of normals reported events that were perceived as expected, novel, within control and positive ($p < .05$), while a larger number of neurotics reported events perceived as unexpected, novel, beyond control and negative ($p < .05$). This further strengthens the argument that expectancy, controllability and desirability may be important variables to consider in future research.
Finally, an additional dimension of stress considered, apart from discrete life events, was that of chronic stress (Table 12). Neurotics and normals differed significantly \((p < .05)\) on the dimension of chronic stress. A greater number of neurotics, as compared to normal subjects, reported chronic stressors. Chronic stress refers to ongoing stressors as opposed to discrete life events. The relation between chronic stress and emotional disorder is less well developed than work on life events (Kessler, Price and Wortman, 1985). The past decade, has seen an increased interest in this area. Ilfeld (1976, 1977) spoke of social stressors in different social roles that were problematic and found that they accounted for one-fourth of the variance in depressive symptoms. Pearlin and co-workers (Pearlin et al., 1981; Pearlin and Schooler, 1978) found that chronic role-related stresses mediated the relationship between life events and depressed mood in a general population sample. They observed that income loss events affected well-being largely by exacerbating already existing financial difficulties. They concluded that life strains formed a backdrop against which life events exerted their effect by creating new strains or enhancing and magnifying existing ones. Life events have been said to bring about chronic stressors (Thoits, 1983) and chronic stress has been found to confound the influence of life events by Billings and Moos (1982) and Hong et al. (1979). An interplay between events and chronic difficulties was also suggested by Brown and Harris (1978). They argued that ongoing stresses
exacerbated the effects of life events by creating stress overload. In addition, life events, trivial in themselves, may take on a new and more negative meaning in the context of chronic difficulties.

Chronic stressors reported frequently in the present study were those of financial stress and family problems such as conflict with in-laws. Financial stress is a common problem encountered in the Indian context even for those above the 'poverty line'. It is specially constraining in the so-called 'middle-classes' who socially are moving upwards and, therefore, have desires and ambitions of the 'upper' classes. However, this upward mobility is not accompanied by an increase in economic resources. This group, therefore, often have to do without having many of their desires fulfilled or are in constant debt, repaying loans etc.

Interpersonal problems are often magnified because of close proximity of family members. Living in small houses, the young adult or married couple, do not find sufficient privacy to sort out their problems on their own. They have to cope with the constant presence, advice, and help of well-meaning in-laws and other relatives. Social class variables need to be examined in greater detail in relation to chronic stresses.

Chronic stresses are relevant because the life event that occurs against the background of ongoing stresses, may be
like the proverbial straw that broke the camel's back. Although fairly innocuous in itself, the context in which the event occurs may result in its being perceived as more undesirable or distressing. The higher distress and the greater number of events perceived as undesirable by the neurotics may be seen in this light. Moreover, chronic stress may also take a toll on the individual's coping behaviour and lead to a helpless-hopeless situation. In the face of an ongoing stress the individual may feel helpless in that he is unable to change the situation.

Although recent research has shown chronic stressors to be more strongly associated with nonspecific distress than life events (Eckenrode and Gore, 1981; Kanner et al., 1981; Pearlin et al., 1981; Pearlin and Schooler, 1978), there is ambiguity in interpreting these results. Chronic stressors are based on subjective assessments and might even be symptomatic of psychiatric impairment (Monroe, 1983). Dohrenwend et al. (1984) have claimed that measures of chronic stress are more confounded with measures of psychological distress than life events scales. The possibility of the clinical state of the neurotic subjects making them perceive more chronic stresses needs to be borne in mind. Feelings of distress may cause them to distort their perceptions and create an inflated estimate of the relationship between chronic stress and illness (Kessler, Price and Wortman, 1985). The development of chronic strain inventories (Stone and
Neale, 1984) and the assessment of 'daily hassles' of living show promise. Statistical techniques are also being developed to resolve this problem. Moreover, Ilfeld (1977) stated that the study of chronic stressors has greater therapeutic potential as they are 'current' or 'ongoing' and, therefore, more amenable for treatment than life events which have occurred and are in the past. On the whole, evidence suggests that chronic stressors are worthy of further investigation.

PERSONALITY

Comparison between neurotics and normals on the personality dimensions of extraversion and neuroticism as obtained on the EPI are presented in Table 13. The lie scale scores were not used to exclude persons from the sample. However, scores were below the cut-off point with the mean score for neurotics being $3.87 \pm 1.08$ and for normals $mean = 3.7 \pm 1.17$ ($t = 0.81$, NS). On the extraversion dimension, neurotics scored significantly lower than normal subjects ($p < .05$). On the neuroticism dimension, as expected, the neurotics scored significantly higher than the normal subjects ($p < .01$). Sex differences were not significant on both the dimensions.

The findings are interpreted within the framework of Eysenck's personality theory. Eysenck and Rachman (1965)
postulated that individuals scoring high on neuroticism and low on extraversion were more prone to depressive disorders, anxiety states and obsessive compulsive disorders. The diagnostic break up of the neurotic group accounts for the pattern of scores. The neurotic group comprised of a larger number of anxiety states and neurotic depressives accounting for the high 'N' and low 'E' scores. Similar findings have been reported by others (Coppen and Metcalfe, 1965; Ingham, 1966).

Scores on the 'N' dimension are known to decrease to a certain extent on recovery (Bianchi and Fergusson, 1977; Coppen and Metcalfe, 1965; Knowles and Krietman, 1965; Verghese and Abraham, 1972). The fall of scores is by approximately 2 to 4. Even allowing for this change the neurotics would still have significantly higher scores than the normals. The dimension of neuroticism clearly differentiates the neurotics from normals. It is, therefore, not subjected to further analysis and only group differences in terms of neurotics and normals will be considered.

Mean scores of the neurotics and normals on the dimension of locus of control are depicted in Table 14. The dimension is scored for externality. The two groups differed significantly (p < .01) with neurotics having lower mean scores than the normals. Normals, therefore, tended to be more externally oriented in their locus of control than neurotics. Strickland (1978) in a review of literature
pertaining to locus of control and health related behaviour concluded that externally oriented individuals tended to have a greater degree of health related difficulties and maladjustment. Ducette, Wolk and Soucar (1972) and Molinari and Khanna (1981) found externals to be better adjusted in certain situations. A non-linear relationship between internal-external locus of control and adjustment has been proposed by Rotter (1975).

A number of other researchers (Hersch and Schoib, 1967; Lipp, Kolstoe, James and Randall, 1968; Lowery and Ducette, 1976; Phares, 1968), have suggested that the relationship between generalized expectancy of locus of control and adjustment is a complex one, and it is by no means clear that it is always healthy to be internal. Rotter (1975) cautioned against the use of the I-E locus of control as a 'good guy-bad guy' dichotomy. In an article dealing with misconceptions pertaining to the locus of control he stated that "in spite of fears and even warnings to the contrary, some psychologists quickly assume that it is good to be internal and bad to be external". Locus of control being based on social learning theory is clearly influenced a great deal by the prevailing socio-cultural milieu. Rotter (1975) noted that since the time the scale was developed the mean scores have risen from 8 to somewhere between 10 and 12 depending upon the sample. Wolfle and Robert Shaw (1982) observed that in a span of 15 years there was an increasing trend towards externality and
stressed that the locus of control dimension is influenced by social, political and economic changes. Keeping this in mind, an item analysis of the I-E scale was undertaken to examine the direction of responses. It was found that there was a marked skew to the external dimension in the normal population on 4 items (Items No. 5, 10, 11 and 23): The first 3 items pertain to education and the fourth to employment. Majority of the normals and some of the neurotics expressed their dissatisfaction with the system of education prevailing in the state and the country. They made reference to press reports of 'marks scandals' and of the corruption in the socio-political system. Hersch and Scheibe (1967) commented that in a highly competitive social situation, where the actions of others may have great relevance for the success of his own efforts an individual may adopt an external stance.

Another source of indirect influence on locus of control could be an individual's religious beliefs. The Hindu philosophy speaks of the concept of Karma based on the law of cause and effect to explain differences in birth and temperament and guide one's action and behaviour. However, this is often misinterpreted as a fatalistic theory encouraging a belief in determinism and an attitude of resignation and passive acceptance of what is seen to be preordained. Wadhwa (1982) in a study of Hindu college students found them to have high external scale scores. In the present study as the sample was predominantly comprised of Hindus (85 per cent),
this is a possibility to be kept in mind. Parsons and Schneider (1974) comparing students from eastern and western societies found more number of externals and greater passive attitude in eastern societies.

Faroqi (1984) in a review of studies using locus of control in India concluded that, on the average, the Indian is marginally more external than the U.S. sample. However, one observation in the present study is that the median score for the entire sample, is higher than the median estimates for the American and Indian sample as reported by Faroqi. Since locus of control is a generalized expectancy theory it is subject to change depending on the individuals experience and reinforcement of behaviour or outcome. It must be remembered that both these groups had experienced stressful life events in the preceding year. Smith (1970) found that patients overwhelmed by external forces in their lives were more externally oriented and showed a significant shift towards the internal end after resolution of the crisis. Similar findings were reported by Crandell and Lehman (1977). The influence of stressful life events on the locus of control needs to be further examined.

Archer (1979, 1979a, 1980) studied the interaction between high trait anxiety (considered isomorphic with neuroticism; Spielberger, 1975) and locus of control. An important finding was that a combination of high trait anxiety with internality was found in respondents diagnosed as having
neurotic disorders and that such a combination was associated with strong feelings of responsibility, worry, rumination and inadequacy. The neurotic sample in the present study resembles the aforementioned group. The low anxious external individuals were described by Archer as perceiving control over a variety of reinforcers as beyond personal control and effectively employing this perception as a defence against anxiety, reflected in self-statements which prohibited worrying and tension in uncontrollable situations. Phares and Lamieill (1974) also suggested that externality may serve a defensive function especially in situations of low expectancies induced by failures. The external may be little disturbed while the internal will be depressed and frustrated. The possibility that, even in the present sample, the normal respondents were being more realistic in their evaluations of stressful situations and expectancies of outcome has to be considered.

The influence of the personality dimensions of extraversion and external locus of control on the experience of stressful life events and subjective distress is presented in Table 15. Although both these variables are unidimensional, representing continuums rather than typologies, for the purpose of analysis the samples were divided into two groups around the median. This was not used to 'type' individuals, but to study the pattern of responses in high and low scorers.

The dimension of extraversion did not significantly
influence the experience of stressful life events and subjective distress. High and low scorers, on an average, experienced approximately one life event. The subjective distress reported was marginally more for the high scorers on extraversion with a greater variability within this group. The dimension of extraversion has a trait of impulsivity subsumed under it (Eysenck and Eysenck, 1977; Rocklin and Revelle, 1981). Hendrie, Sachar and Lennox (1975) observed that impulsive, reckless individuals may be instrumental in generating more life events. However, high scorers on the dimension of extraversion in the present sample did not indicate a propensity to experience significantly more number of stressful life events and greater subjective distress. Gray (1967) suggested that introverts may be more stress reactive than extraverts, but little pertinent data was presented (Sipperelle, Ascough, Detrio and Horst, 1977).

The dimension of locus of control was found to significantly influence the experience of stressful life events, but not that of subjective distress (Table 15). Subjects scoring lower on the dimension of externality (internals) experienced slightly more life events than high scorers (externals). Although internals reported greater subjective distress than externals, the difference was not statistically significant. Similar findings have been reported by Gilbert and Mangelsdorff (1979); their prediction that internals would report greater stress and lowered self-esteem in the face of
difficult life events was found to be true. Houston (1972) observed that internals were more physiologically aroused under stress. On the contrary, Miller (1979) postulated that control produced more anticipatory relaxation and less anticipatory arousal, and thus, the overall impact of an aversive event may be lessened. Feather and Davenport (1981), Johnson and Sarason (1978) and Procink, Briers and Lussier (1976) reported that life change was related to illness only in individuals external in their locus of control orientation. Kilman, Laval and Wanlass (1978) found no differences in the number of life events experienced by internal and external scorers in a two year period. However, external scorers reported a significantly more difficult adjustment to life events than internal scorers. These findings are contrary to those of the present study.

A large number of studies have examined the role of locus of control as a moderator variable in the relationship between life events and illness rather than the direct influence on life events per se. In this regard a number of researchers have reported the moderating effects of locus of control (Carnes, 1980; Denny and Frisch, 1981; Canellan and Blaney, 1984; Hussaini and Neff, 1981; Kno, Gray and Lin, 1979; Morgan, 1980). Converse findings have been reported by Doty (1983), Nelson and Cohen (1983), McFarlane et al. (1983) and Sandler and Lakosy (1982).
Although beliefs about personal control have been implicated in stress and coping literature, relationships between control and stress have not been as simple as expected. It is not clear how these beliefs influence stress and coping (Folkman, 1984). The belief that one has control over life events does not always lead to reduction in stress and vice-versa. Some researchers (Abramson, Seligman and Teasdale, 1978; Canellen and Blaney, 1984; Gong-Guy and Hamman, 1980; Hamman and Mayol, 1982; Harvey, 1981; Rothwell and Williams, 1983), have studied locus of control orientation in relation to specific dimensions of events and concluded that when internal attributions are held for negative events that are uncontrollable a greater degree of self-depreciation and other related symptoms ensue, while external attributions for such events reduce negative effect. In such cases Golin, Terrell, Weitz and Drost (1979) and Langner (1975) state that the internals suffer from an 'illusion of control' rather than actual control. Lefcourt (1973) reported that such an illusion had a definite and positive role in sustaining life. Kobasa (1979, 1979a) found that low illness groups showed more control. Many others have found no relationship between perception of control over events and locus of control orientation (Barthe and Hammen, 1981; Firth and Brewin, 1982; Hammen and Cochran, 1981). In the present study, internals perceived more life events as uncontrollable than externals. However, this difference was not statistically significant (36, 20, $X^2 = 1.09$, NS). Expectancies of personal control
over events which were actually beyond their control may have led to the greater subjective distress in the internals as indicated in Table 15. Control may enhance stress if the person believes that there are actions he should be taking, but is not, or if the person tries to control processes that are uncontrollable (Averill, 1973). The Alcoholics Anonymous serenity prayer stresses this very point when it states "... God grant me the serenity to accept the things I cannot change, courage to change the things I can, and the wisdom to know the difference".

COPING BEHAVIOUR

A comparison of the mean number of coping behaviours used by neurotics and normals (Table 16) indicated that normals, on the average, had a significantly larger coping repertoire than neurotic subjects. Pearlin and Schooler (1978) stated that having "a particular weapon in one's arsenal is less important than having a variety of weapons". Coping behaviours have also been conceptualized as the 'currency' expended in a specific stressful situation and the size of the coping repertoire as the 'bank account' from which 'currency' is drawn (Roskies and Lazarus, 1980).

A larger coping repertoire indicates a broader range and variety of coping behaviours at the individual's disposal.
When faced with a stressful situation, he has a rich and varied repertoire that he can bring to bear in coping with and reducing distress. The fact that, in the present study, normal subjects have a significantly larger coping repertoire \( (p < .01) \) and significantly lower mean subjective distress \( (p < .01) \) seems to suggest this possibility. However, the actual association needs to be examined before any conclusion are drawn. Pearlin and Schooler (1978), in their study, reported that as the number of coping responses that people employed increased, stress associated with role strains reduced.

Another possibility suggested is that a person with a larger coping repertoire may be more flexible in his use of coping responses (Wheaton, 1983). Having a large coping repertoire increases the chances of trying out new ways to solve existing problems. This may be especially important when an individual is faced with a chronic stress; having a narrow, inflexible coping repertoire limits the degree of success with which one can tackle long-term stresses and bring on a sense of failure or hopelessness. An ability to change one's strategies, however, may help an individual to retain a positive outlook regarding the solution of the problem.

The size of coping repertoire was neither influenced by demographic factors of sex, age, education and marital status (Table 17) nor by personality variables of extraversion and locus of control (Table 18). This highlights the possibility
that the difference in the sizes of coping repertoire between neurotics and normals is a 'real' difference and related to health outcome in a crucial way, as it is not influenced by demographic and personality variables.

The issue of broad versus narrow coping repertoires is of theoretical and clinical relevance (Roskies and Lazarus, 1980). Teaching specific coping skills may have limited value and help in tackling only specific situations. Generalizability to other situations may be poor as they may require new strategies or different combinations of existing strategies. In this context, strengthening the individual's coping repertoire and increasing the variety of coping responses at his disposal may pay better dividends. It is to be remembered, however, that the index of size of coping repertoire disregards the quality of the coping methods subsumed under it. In addition, having a larger repertoire may be useless unless the individual is able to mobilize it when needed. It is, therefore, what one actually does in a particular stressful situation that counts in the ultimate analysis, rather than the mere size of the coping repertoire. To extend Pearlin and Schooler's (1978) analogy, merely having a variety of weapons may be ineffective unless those 'weapons' are well lubricated and geared for necessary action. In addition, having the right kind of 'weapon' for the particular fight at hand may be crucial. Roskies and
Lazarus (1980) stated that the present knowledge of the usefulness of the size of coping repertoire is severely limited. It is still not clear how 'deposits' are made and how 'funds' are withdrawn when needed, that is, how coping behaviours develop and what facilitates their retrieval. The size of coping repertoire needs to be examined in greater detail with regard to these factors.

Coping behaviour commonly used by neurotics and normals are presented in Table 19. When faced with a stressful situation, both neurotics and normals appear to use a problem-solving approach; wherein a direct attempt is made at understanding and resolving the problem. Folkman and Lazarus (1980) stated that both problem-focused and emotion-focused coping are used in virtually every stressful encounter. They found that any one type of coping was used alone, less than 2 per cent of the time. While the frequent use of problem-solving strategies in the present study (approximately 87 per cent to 98 per cent of the time) does not, therefore, appear surprising, the absence of the frequent use of emotion-focused coping behaviour is noteworthy. An interesting observation by Folkman and Lazarus (1980) in their study was that, in certain situations, a problem-focused item was used for regulation of emotion, or an emotion-focused item to manage a problem. For example, the item, 'went over the problem again and again to try and understand it', was seen as problem-focused when the situation was of an impending
harm, but as emotion-focused when the harm had already occurred. Certain items may, therefore, be sensitive to the situational context. Since coping behaviour, in the present study, was assessed in relation to stress in general, such an analysis was not feasible.

Table 20 deals with coping behaviours, the use of which were reported infrequently by neurotics and normals. Numbers in brackets refer to the serial number in the table. Two coping behaviours, that of 'taking drugs to feel better' (19) and 'taking a big chance or doing something very risky' (20) were totally absent in both groups. This could be because of the socio-economic background that the respondents hailed from - most of them from the so-called 'stable middle class'. Some coping styles such as 'go on a shopping spree' (1) or 'make yourself feel better by eating or nibbling' (13) may not be socio-culturally relevant (or prevalent). Some of the items introduced specially as culture-specific items such as 'consult a faith healer' (4), 'attend bhajan groups' (9) may be more often seen in a rural rather than an urban sample such as the present one. Some of the coping behaviours, although infrequent, are significantly influenced by the age of the respondents: 'read books on philosophy and religion' (2), 'attend religious discourses and talks' (3), 'find a purpose or meaning in your suffering' (7) are age-related coping methods more often seen in elderly people. As the present sample was restricted to people between 20-40 years,
these behaviours may have been infrequently reported. Yet others, although infrequent, may be unique in terms of their occurrence. Coping styles such as 'help others in distress/do social work' (10), or 'write short stories, poetry, etc.' (16) are positive behaviours where the person channelizes his own distress in a creative fashion. These coping behaviours, because of their very nature, cannot be expected to occur frequently.

Although these 20 items were infrequently reported by this group of 120 respondents, one must be careful before deleting any of these items in a revision of the scale. The scale must be tried out on other populations and the frequency of item use compared with that of the present study. Folkman and Lazarus (1980) have cautioned that there is always the danger of deleting items that appear valueless in one population, but are, in fact, valuable in another.

Seventeen coping behaviours were differentially used by neurotics and normals (Table 21). Twelve coping behaviours were used by a larger number of normals, while five others by a greater number of neurotics. Active-cognitive and behavioural coping methods were more often used by normals. The methods of 'anticipate probable outcomes and mentally rehearse them' (3), 'draw on past experiences of similar situations' (8) were cognitive and 'know what has to be done, so double your efforts and try harder to make things work' (2) and 'turn to work to take your mind off things' (11) were
The importance of such behavioural coping strategies in reducing aversiveness has been highlighted by Sanchez-Craig (1976). The use of such methods was observed in the 'mentally-well' by Bell (1977) and in 'efficient copers' by Schill, Ramanaiah and O'Laughlin (1984). Neurotics, on the other hand, reported more avoidance coping behaviours in the form of 'see more movies than usual' (14) and 'read novels, magazines etc. more than usual' (15). The active-behavioural strategy they employed was, in itself, aimless; 'pace up and down thinking about the problem' (17). Billings and Moos (1981) observed that avoidance coping methods were strongly related to stress and that healthy individuals were less inclined to use such methods (Holahan and Moos, 1985). Lazarus (1966) found that the adequate copers were one who was oriented towards acting directly on the problem rather than avoiding it.

Social support or help-seeking has been conceptualized as a form of coping behaviour (Thoits, 1986). Numerous studies have examined the role of social support as a moderator in the stress-illness process (Thoits, 1982; Turner, 1981). While Lieberman and Mullen (1978) concluded that help-seeking behaviour had no adaptive consequences, Brown and Bradford (1978) observed that self-reliant persons or those who sought help from informal associates were better prepared to face stress, than persons who were reluctant to seek help or those who sought help from professionals alone. A greater number
of normals reported the use of help-seeking behaviours such as 'seek reassurance and emotional support from friends' (4), 'talk to a friend who could do something about the problem' (5) and 'talk to a family member who could do something about the problem' (7). Neurotics reported the behaviour of 'keeping feelings to themselves' (13). Normals, therefore, made use of their social networks for coping assistance while the neurotics did not. Antonovsky (1973) proposed that social ties with other individuals were an important factor in resistance to health breakdown. Supportive networks of family and friends may strengthen coping and, in turn, resistance by providing validation of self-worth in the face of challenges which tend to lower a person's self-esteem. These support networks may also provide a source for ideas and suggestions about alternative approaches to problem solving. Non-use of social support, however, does not necessarily imply a non-availability of support. Henderson, Byrne and Duncan-Jones (1981) reported that it was not the lack of social relationships that was associated with subsequent morbidity, but the perceived inadequacy of these relationships and the coexistent presence of adversity that was predictive of symptom onset. The perceived inadequacy of relationships could also be a manifestation of personality attributes activated by the illness. Billings and Moos (1985), on the contrary, found that depressed persons had fewer supportive relationships with friends, family members and co-workers.
A larger number of normals indicated the use of a positive approach to the stressful situation and tried to console themselves that things were not all that bad and could be worse (12), while a greater number of neurotics reported the use of making negative comparisons with others and feeling worse off (16). Menaghan (1982) reported that the use of optimistic comparisons was associated with lower distress and fewer later problems. Robinson and Granfield (1986) found that people who had experienced stressful life events, but did not suffer distress were those who could look on the brighter side of things. Coyne, Aldwin and Lazarus (1981) suggested that the coping strategies of depressed people are characterized by negative self-preoccupations that may hamper their problems. However, at this point, it is not clear whether this coping behaviour plays a role in the development of the disorder or whether it is a result of the disorder per se. On the other hand, learning to look at things positively and retaining an optimistic outlook even when faced with stress may serve as a resistance factor. Lazarus (1966) stated that the successful coper was one who was optimistic about chances of success. This coping method, therefore, merits more attention from researchers.

Finally three other coping methods were more frequently reported by normals. These were 'pray to God' (1), 'blame your fate, sometimes you just have bad luck' (16), and 'blame yourself' (10). The first two coping behaviours are more in
keeping with an external locus of control, while the third is reflective of an internal orientation. This seemingly controversial pattern of behaviour may be explained by the fact that, in the present study, normals had higher scores on the external dimension of the locus of control scale than neurotics. Molinari and Khanna (1981) and Rotter (1975) have related that there are a group of respondents who can be labelled as 'defensive' externals who attribute failure to luck as a defensive manoeuvre and yet resemble internals on behavioural indices of task-related behaviour. Some researchers (Ducette, Wolk and Soucar, 1972; Phares and Lamiehl, 1974) have suggested that adopting an external orientation when situations are uncontrollable as a defense against negative self-evaluation is a positive characteristic. However, its prolonged use may be non-adaptive as it reduces feedback from the environment. However, the fact that the normals report the use of blaming themselves indicates that they are probably making differential use of these coping behaviours. They are able to escape negative feelings in uncontrollable situations by blaming their fate or praying on God, while blaming themselves in other situations of failure may help them to overcome the problem in future. However, this dynamic, interactive process needs to be examined further before any conclusions are drawn. What must be borne in mind is that coping behaviours, in themselves, are not 'good' or 'bad', but the situations in which they are applied that make them effective or ineffective. Moreover,
coping is usually a combination of behaviours, rather than a single act (Stone and Neale, 1984).

The influence of demographic factors on coping behaviour was examined. However, as education was significantly related to sex and marital status to age, only gender differences and age were assessed. Gender differences with regard to the use of coping behaviours are presented in Table 22. More number of women reported the use of help-seeking from family members (1,2), trying to forget the whole thing (3), reading novels or magazines (4), spending time in the company of children (5) and reading popular guide books for answers to their problems (6). The fact that all the women were educated and a majority of them were housewives is reflected in this pattern of coping behaviours. Men reported coping methods such as 'retreat to a quiet spot to think things over' (7), 'go for long walks' (8) and 'pace up and down thinking about the problem' (9). Men, in contrast to women, showed a tendency to sort things out for themselves rather than seek support from others.

Gender differences in coping behaviour have been frequently reported. Sidle et al. (1969) observed that females tended to seek additional information, talk with others and become involved with other activities to reduce tensions. The use of more social centered coping styles in women was also reported by Hovanitz (1986). Ilfeld (1980, 1980a) noted that females more frequently sought outside
help and followed avoidance or rationalization. The main findings in these studies is similar to that of the present one.

Billings and Moos (1981, 1984) and Folkman and Lazarus (1980) observed that men made greater use of problem-solving coping methods, while Schill, Ramanaiah and O'Laughlin (1984) and Tanck and Robbins (1979) reported that males resorted to methods such as use of drugs, alcohol or sexual comfort. These findings are at variance with that of the present study.

The influence of age on coping behaviours is presented in Table 23. The sample was split on the median as mentioned earlier. Twelve coping behaviours were found to be age related; 8 being reported more often by the older age group and 4 by the younger in age. Older respondents showed a tendency to distance themselves from the stressful situation by getting away from things; by turning to work to take their mind off (1), spending time in the company of children (3), making light of the situation (5), taking a vacation (6) and by engaging in religious pursuits like visiting places of worship (2) and reading books on philosophy and religion (7). In addition, they were able to view things from a positive outlook: things are not all that bad and could be worse (4) and finding a purpose or meaning in their suffering (8). The younger in age, on the other hand, showed a tendency to withdraw into a shell by keeping their feelings to themselves (9) and avoiding people and seeking complete
isolation (10). Moreover, they resorted to negative comparisons with others (11) and avoidance methods of thinking about fantastic, unreal things to make themselves feel better (12). Ilfeld (1980, 1980a) observed that with increasing age, acceptance of the situation was more often reported as a coping style, while no effect of age was found by Folkman and Lazarus (1980).

In India, it is a common practice, especially among the Hindus (constituting the majority in this sample) to visit important places of worship when one is going through a 'bad time' or facing hardships. Special offerings to God are made at specific temples as a sort of 'thanksgiving' when all goes well or the difficulty is tided. It is also a culturally accepted practice that one turns to religion and philosophy as one gets older. This may be a result of the ancient practice of 'Ashrama-Dharma' wherein, in the developmental life cycle, each individual passes through the stage of 'Bala' (childhood), 'Brahmacharya' (bachelorhood), 'Grihastha' (householder) and 'Vanaprastha' (renunciation). Having fulfilled one's duties and obligations as a child, spouse and parent and enjoyed the pleasures of life, the person was expected to devote the remaining years of his/her life in religious pursuits. However, in this sample, the upper age limit was just 40 years and the latter explanation may not be applicable. In the West, Lilliston and Brown (1981) observed that religious solutions were perceived as
being more reasonable with physical, life threatening problems rather than with psychological problems. Jenkins (1979) found that attendance at religious services had a strong association with various types of psychological problems.

High and low scorers on the dimension of extraversion differed in relation to certain coping styles (Table 24). High scorers tended to 'seek reassurance from friends' (1) in keeping with the trait of sociability subsumed under extraversion. The strong social and affiliative needs of extraverts are readily explicable (Rocklin and Revelle, 1981; Wilson, 1977). A greater number of low scorers on the extraversion dimension, that is, introverts reported the use of avoidance strategies like keeping feelings to themselves (2), reading more novels (3), wishing that they could change what had happened (4), avoiding people (5), retreating to a quiet spot (6) and going for long walks (7). These coping behaviours conceptually fit into Eysenck's description of the introvert as a quiet, retiring sort of person, fond of books rather than people. In an early study, using a different framework, Becker (1967) suggested that extraverts tended to use coping mechanisms of repression, denial and reaction formation in greater degree than isolation, intellectualization and projection. For introverts, the reverse was true. In India, the dimension of extraversion in relation to coping behaviours is relatively unexplored.
Differential use of coping behaviours in high and low scorers on the I-E locus of control dimension are presented in Table 25. The group was split on the median as stated earlier. Four coping methods were used by a greater number of externals, than internals. These were 'blame fate, sometimes you just have bad luck' (1), 'pray to God' (2), 'consult an astrologer' (3) and 'feel that other people are responsible for what happened' (4). These coping behaviours fit into the description of the high scorer on externality. People, external in their locus of control orientations, tend to regard reward as contingent on luck, fate, chance or powerful others. Stebbins and Stone (1977) reported that the use of such methods helped the externals escape from negative feelings associated with failure. Consulting an astrologer is a culture-specific item not reported in western countries.

In India, especially among the Hindus, it is a common practice for the astrological map to be drawn as soon as a child is born. The planetary positions at the time of birth are plotted and, quite frequently, the family 'Pundit' or priest forecasts the child's future, his 'ups' and 'downs' in the path of life. Special prayers and proprietary worship are prescribed to ward off evil when planetary positions are unfavourable. The astrologer is, therefore, an important person and is consulted before commencing any new or auspicious activity like getting married, changing jobs, building a
house etc. In times of stress, he provides solace and comfort, informing the individual under stress that it is for a limited period of time and prescribing certain ways of reducing the ill effects.

Studies done in the west with regard to the locus of control have yielded varied results. Anderson (1977) and Phares (1966) reported that internals employed more task centered coping and fewer emotion-centered coping than externals, while Tanck and Robbins (1979) found that internals were inclined to meditate, while externals showed a greater likelihood to seek professional help, fantasize or drink alcohol when faced with stress. Lefcourt (1976) reported that internals took a more active stance towards life, shouldered personal responsibility, explored more effective coping strategies and were better able to delay gratification than externals. Such a pattern did not emerge in the present study.

From the large number of coping behaviours reported by the neurotics and normals in relation to stress, certain coping behaviours seem to be consistently used by certain groups of people. Demographic and personality variables do influence the use of certain coping behaviours, probably resulting in some consistency in the use of a few coping methods. Given a particular stressful situation, the choice of coping behaviours will be determined by the dimension and degree of the stress situation as perceived by the individual,
the subjective distress experienced, and by the individual's demographic characteristics or personality in terms of extraversion or locus of control. It is evident that there is a complex interaction of the individual with the situation which determines the final outcome. The present study merely throws up interesting possibilities which have to be explored further. A more sophisticated research methodology is needed to unravel these complex interactions. The findings, however, emphasize the importance of studying these coping behaviours in greater detail, so that, in a clinical setting, the therapist can know what are appropriate coping behaviours for a particular individual keeping in view his demographic characteristics and personality make up and what coping behaviours are deficient.

Coping behaviours in relation to specific life events were collected in the second administration of the coping checklist referred to as CCL-II. However, as in each individual respondent the actual stressful life event for which coping behaviours were reported varied, analysis was done in terms of areas of events rather than single events. In three areas (bereavement, work and education) analysis was possible because of sufficient and comparable frequencies in both groups. The three most frequently reported coping behaviours (rank-ordered) are presented in the Tables 26 to 28. The total number of different coping behaviour used are also reported in each area.
Coping behaviours in relation to bereavement were reported by 11 neurotics and 10 normals subjects (Table 26). While both groups reported the use of seeking reassurance and emotional support from family and friends, there was a notable difference present between the groups. The inevitability and finality of bereavement was accepted by normals, while neurotics reported praying to God. Coping behaviour in relation to bereavement has been studied by a number of researchers (Ben-Sira, 1983; Lindemann, 1944; Parkes, 1972). Emotion-focused coping and primary group support have been found to be important in enhancing adjustment after irrevocable loss such as bereavement (Ben-Sira, 1983).

Table 27 shows the coping behaviours used by 11 neurotics and 12 normals in relation to work-related events. Normals indicated the use of a combination of emotion-focused and problem-focused coping behaviours in the form of seeking reassurance from friends, praying to God and making positive comparisons with others, while, at the same time, doubling their efforts and trying harder to make things work and turning to work to take their mind off things. In studies of non-clinical populations (students and community residents) Folkman and Lazarus (1980, 1985) found that subjects used combinations of problem and emotion-focused coping during periods of stress and conceptualising coping in terms of any one alone was incomplete. Having a favourable attitude
to oneself and making positive comparisons have been shown by Pearlin and Schooler (1978) to have a direct effect on reducing stress. Neurotics, in the present study, used more of avoidance and passive acceptance as indicated by coping methods such as keeping feelings bottled up within themselves and accepting it since nothing can be done. Avoidance strategies were found to increase stress by Billings and Moos (1981).

Coping behaviour in relation to education were reported only by males in both groups (Table 28). Examination related events were most frequently experienced by both neurotics and normals. Both groups of subjects reported the use of seeking reassurance and emotional support from friends and blaming their fate (bad luck). However, while normals reported, in addition, making a plan of action and doubling their efforts to try harder and make things work (problem-focused coping), neurotics reported a bottling-up of feelings (keep feelings to self) and wishful thinking (wish I could change what has happened - emotion-focused coping). Coyne, Aldwin and Lazarus (1981) observed that depressed persons tended to seek emotional and informational support and indulge in wishful thinking.

Differences in coping patterns between neurotics and normals emerged in the life event areas of marital, family and health. As stated earlier, frequencies were either insufficient or not comparable in both groups and, therefore,
not analyzed. However, certain important issues emerge even from the descriptive analysis of coping in relation to the three areas of bereavement, work and education.

Firstly, coping is not a single act, but a constellation of behaviours. The mean number of coping behaviour reported on the CCL-II in relation to a single event by neurotics was $7.58 \pm 3.51$, and by normals $6.87 \pm 3.25$ ($t = 1.15$, NS). A variety of coping behaviours are used to handle a single stressful event and, what is likely, but cannot be determined from a cross-sectional, single-point assessment is that the particular strategies used change over time. Some may be tried first or initially and others added later. The sequential use of coping behaviours is worthy of further study. Fleming, Baum and Singer (1984) have cautioned that coping is a dynamic process and changes over time may not be reflected by asking people how they coped with a specific event. That coping constitutes a combination of methods rather than a single act has been postulated by other researchers too (Billings and Moos, 1982; Folkman and Lazarus, 1980; Pearlin and Schooler, 1978; Stone and Nslea, 1984).

Secondly, the earlier tables on coping behaviour indicated that demographic factors and personality variables do influence the use of certain coping behaviours probably leading to certain consistencies in coping styles. Pearlin and Schooler (1978) referred to this as 'modal styles' as
determined by personality resources. At the same time, one cannot completely understand coping, without looking beyond these 'stable' attributes of individuals to specific responses in problem situations. The most frequently reported coping behaviours (reported in Table 19) are not used commonly in relation to the three areas of stress given here. Praying to God and help-seeking behaviour while reported more frequently by normals (Table 21) are also used by neurotics, with almost equal frequency, in relation to specific life events (e.g., bereavement and education). While other behaviours used more by normals than neurotics that of 'doubling efforts and trying harder' and 'turning to work to take the mind off' are not reported by neurotics at all when it comes to specific situations (work and education). Keeping feelings to oneself, used more by neurotics than normals (Table 21), is not reported by normals in specific stressful events (work and education).

This indicates that in terms of the coping behaviours constituting the coping repertoire of neurotics and normals, there appears to be some degree of overlap. Certain behaviours are reported equally often by both, while some others more often by one than the other. The normals have a marginal advantage in that they have significantly larger coping repertoires than neurotics. However, when it comes to the actual handling of stressful situations and the specific coping behaviours used, the difference between neurotics and normals
becomes more marked as seen in Tables 26, 27 and 28. The preliminary results here seem to support Roskies and Lazarus (1980) observation that how one mobilizes or uses a particular coping behaviour may be crucial rather than merely possessing it in one's repertoire. This possibility has tremendous clinical implications: Lack of coping skills may not necessarily be the factor that differentiates the neurotics from the normals. The crucial difference may be in the inability of the neurotics to use the coping skills they possess. It is probably these variations in coping that result in the different levels of distress experienced by different individuals exposed to identical or similar stresses. The identification of the factors that inhibit coping action may be an area worthy of examination.

Finally, the total number of types of coping behaviour used in relation to each area of bereavement, work and education reported in Tables 26, 27 and 28, indicates the sheer richness and variety of responses that are used to handle similar stressful situations. The person x situation interaction variance is highlighted when, for example, we observe that 34 different coping behaviours are reported by 11 neurotic subjects to handle bereavement, while 18 are reported by 10 normals. Similarly, 31 different coping methods are reported by 11 neurotics in relation to work area, while 12 normals report 36 different responses. In education it is 27 and 20 respectively. This indicates the magnitude of
individual differences that exists. Ilfeld (1980, 1980a) observed that demographic characteristics explained only a small amount of variance in coping and that coping behaviours were more tied to the specific situation rather than any particular personality type. It is again probably this very diversity in the use of coping behaviours to similar stressful situations that has posed difficulties for researchers to arrive at any satisfactory classification or taxonomy of coping (Moos, 1974). The richness of behaviour evidenced here makes one cautious in hoping for any simplistic solution to this problem. Coping evidently is a complex amalgam of behaviours determined, in part, by the different situations it is called into play and the perception of these situations by the individual. Lazarus' (1966) theoretical postulation of the process of primary appraisal and secondary appraisal seems to be the closest to describing this process of interaction. However, a lot of work in the area is needed before one can probably even begin to identify the various strands woven into this fabric.

**TOOL DEVELOPMENT**

The SLEI and the CCL were developed specifically for the present study. The experiences of the researcher with regard to the use of the tools and the results obtained will, therefore, be dealt with briefly.
The SLEI comprises of 86 items spread over 9 categories and was developed as a population specific tool. That it was comprehensive was indicated by the fact that no new items were generated over the course of 120 interviews. However, only 43 of the 86 items were reported as being experienced by the subjects. This may imply several things: Firstly, since the time span covered was limited to one year many events that may have occurred prior to this period may not have been included. Events like 'employed for the first time', 'birth of first child' by their very definition can happen only once, others such as 'got married' are still by and large, 'once in a lifetime' events in India. It may be important, therefore, to study a larger period or even a lifetime prevalence in the 20-40 years age group before deleting any items.

Secondly, some items may not be culturally very relevant, or frequent such as 'demoted', 'renovated home' or 'started hire-purchase scheme'. However, the last item, 'hire-purchase scheme', is slowly catching on in urban areas and may be more frequently reported in future studies. Some other items like 'retired' are not applicable to the 20-40 age group as retirement is usually around 55-60 years. If the list is to be kept specific to this age group then such an item can be dropped. If the purpose is to have a comprehensive list suitable for a wider age group then items for older age ranges have to be added. However, the advantage lies in the fact that items are clearly and simply worded and are not confounded by illness factors.
The perceived dimensions of stressful life events that of expectancy, novelty, controllability and desirability, proved to be useful and meaningful dimensions in the present study. Apparently it is not the mere occurrence of the event, but how it is perceived by the individual that seems to be important. How much the individual is prepared for the event, to what extent he is able to exercise control in making it happen or preventing it from happening and its valence are dimensions which need to be examined in greater detail. Novelty did not seem to be a very significant dimension as, by their very nature, most of the events were as already mentioned 'once in a life-time' events and experienced for the first time.

The subjective distress scale is another feature of this inventory. The impact of the life event in terms of the distress aroused in the individual can be rated on a 5-point scale. No difficulty in using this scale was reported by respondents or perceived by the investigator. The idio-syncratic interpretation of events are of special use in clinical populations (Byrne and Whyte, 1980). Future research can probably identify events which differentiate groups in terms of the distress aroused. Events which generate greater levels of distress may also be the events likely to trigger off illness in high-risk or vulnerable individuals or groups. This needs to be further examined to see if such events can be isolated and the population at risk for these events can be prepared to deal effectively with them.
While the SLEI has much to be recommended in terms of the wealth of information it provides, it is time consuming. The semi-structured interview method, in a one-to-one situation yields maximal and reliable information (Miller and Salter, 1984). Although the interview can be self-administered it would be at the cost of reducing the reliability of information. The number of items, together with the dimensions and subjective distress do not make for rapid scoring. The information gained, however, compensates for labour inputs.

The 70 item CCL is a comprehensive list of coping behaviours. No new items were generated over the 120 interviews, although the checklist was kept open-ended. Out of the 70 coping behaviours, 20 were reported infrequently by the present sample. However, it is probably premature to say if these items should be deleted as certain coping methods, even though infrequent, may be unique in terms of their contribution in reducing stress. Moreover, they may be relevant in other populations. The checklist needs to be used in different samples before deciding on this issue.

In the development of the checklist a special effort had been made to include culture-specific items. Some of these such as 'visiting places of worship/going on a pilgrimage', 'reading books on philosophy or religion', 'reading popular guide books for answers', 'making special offerings or performing pujas' and 'consult an astrologer'
have emerged as significant coping behaviours. While these items indicate culturally sanctioned modes of coping with stress, their efficacy in reducing distress needs to be examined. Some other items added for the same reason like 'consult a faith healer' and 'attend bhajan groups' were not reported often probably because of the demographic nature of the sample. While certain consistencies in coping behaviour were indicated as determined by demographic factors and personality variables, the diverse behaviours and magnitude of individual differences reported indicate that it is probably premature to talk of factors or types of coping behaviour.

The CCL is easy to comprehend and answer, being in a simple 'Yes-No' format. It can be self-administered and lends itself to easy scoring. The total score indicating the size of coping repertoire needs to be meaningfully explored. However, the study indicates that it is the things one does that seem to count rather than the sheer quantity of behaviours at one's disposal.

With regard to reliability both the tools pose a special problem as the events and coping behaviours reported are likely to change with time. Test-retest reliabilities may therefore, be of minimal utility and meaningfulness.
The aim of the study was to examine personality and coping behaviour in relation to stressful life events. In general, the purpose of life event research has been to demonstrate a temporal association between the onset of illness and an increase in the number of stressful life events. However, as Rabkin and Struening (1976) observed life events may, at best, account for 10 per cent of the variance in illness. Illness onset has been associated with a number of potential factors, including the presence of stressful life events, perception by the individual that these events are stressful and the ability to cope with these situations. How people cope with stress may be more important than the frequency and severity of stress episodes themselves. Stressful life events, in themselves, are inevitable and, more importantly, not inherently pathogenic.

The findings of the present study indicate that it is not the mere number or occurrence of life events that differentiates the neurotics from normals, but probably the timing of such events. Neurotics seem to experience more number of events which occur in a short space of time and which are more likely to be against a background of chronic stress. The role of chronic stress in exacerbating the effects of life events needs to be specifically examined.
The next issue raised is that the circumstances in which the life events occur may determine how the individual perceives these events. The primary appraisal of the significance of these events may be influenced by various aspects of events such as whether they are expected or unexpected, controllable or uncontrollable and having positive or negative qualities. The present study indicates that these dimensions need to be highlighted in future life event research. All the events experienced by the respondents were 'normative' and not catastrophic in themselves. It is, therefore, this cognitive process of appraisal of the event that differentiates the potential stressor which is then perceived as extremely distressing.

The role of demographic factors, such as sex, age, education and marital status, and that of personality dimensions (extraversion and locus of control) in influencing the perception of stress and distress did not emerge clearly in the study. However, their contribution to the individual's evaluation of stressful life events needs to be more explicitly delineated.

The major finding of the study, however, is the role of coping behaviours in relation to stress. The findings indicate that coping is a complex constellation of different behaviours determined, to some extent by the demographic and personality characteristics of the individual, and also by the specific nature of the stressful situation. Moreover,
differences in coping behaviour and, more importantly, in the use of coping behaviours in specific situations seem to be the crucial factors in determining differences between neurotics and normals. However, the actual identification of concrete coping behaviours that have a stress-reducing function was not feasible in the present design. This is complicated by the fact that individuals engage in the same behaviour for different reasons in different situations with varying effects. In addition, it is not one single coping method, but a vast array of responses that are pressed into service to handle stress. People, facing the same stressful life event, use similar and different coping methods. This indicates that normative or modal coping responses are used by different individuals to similar stresses, yet the differences in coping behaviour employed are probably crucial in determining the degree of subjective distress experienced.

The study implies that the role of coping behaviour in relation to different types of stress is an important factor in determining distress in relation to stressful life events. In addition, demographic and personality characteristics do play some role in influencing the choice of coping behaviours. However, more clinically meaningful information may be gained by knowing how people cope with specific stressors and what determines the choice of coping methods.
LIMITATIONS OF THE STUDY

The study was cross-sectional and retrospective and the usual criticisms against such a design are relevant here. Reporting of life events and the attribution of subjective distress after the event has occurred are likely to have been contaminated by the illness factors in the neurotic group. However, based on the reported experiences of earlier studies, great care was taken to plug quite a few of the loopholes in the methodology. Besides, the main emphasis was on personality and coping behaviour rather than life events per se. The cross-sectional nature of the design prevented the examination of the timing and sequence of coping actions and the dynamic changes that take place in coping as individuals face the stress over time. Coping is, essentially a process and the complexity of such a changing process can be examined only in a longitudinal study.

The selection criteria, the fact that it was clinic-based, and the time-bound nature of the study resulted in a small sample size. Moreover, the criteria for selection may have made the patient sample an 'atypical' group and, thus, reduced the generalizability of the findings to other neurotics. The small sample size probably prevented the emergence of the influence of demographic factors and personality variables. The method of splitting the subjects at the median may have diluted the differences between groups.
If those subjects at the median value had been dropped from the analysis, group differences would have been more marked. Ideally, however, the personality variables should have been treated as unidimensions, with subjects placed on a continuum.

The research instruments are still in a formative stage. The issues raised in this study can only be answered in a series of interlinked researches. The present enquiry should, therefore, be seen as a preliminary, rather than as a definitive study.

SUGGESTIONS FOR FUTURE RESEARCH

Systematic accumulation of knowledge cannot proceed without comprehensive long term research. The issues raised in the present study need to be examined in further researches to enable hypothesis-generation and testing.

The study highlights several potential areas for future work:

1. The examination of the nature of chronic stress and its relation to and interplay with stressful life events.

2. The identification of normative events in various groups of people differing in socio-demographic characteristics.
3. The role of dimensions of stress in determining the subjective distress of individuals.

4. The delineation of coping behaviour as determined by demographic and personality characteristics.

5. The assessment of coping behaviour in relation to specific events in different groups of individuals and finally,

6. The assessment of effectiveness of coping behaviour in managing or reducing distress.

...