Premorbid personality development and functioning in elderly depressives: a retrospective community study.

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Set is the sun of my years
And over a few poor ashes
I sit in darkness and tears

Gerald Massey  A Waal

Father Time is not always a hard parent, and, though
he tarries for none of his children, often lays his hand
lightly on those who have used him well.

Charles Dickens  Barnaby Rudge
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ABSTRACT

Depression is the most common psychopathological syndrome in the elderly (Blazer, 1982). Yet, with appropriate treatment, depressive symptoms generally have a favourable prognosis. Researchers such as Post (1972) and Zung (1980) have emphasized the importance of the premorbid personality in understanding depression and planning its effective treatment. However, personality studies are unpopular and often methodologically unsound. The present study attempts to investigate the problem of the premorbid personality in depressed elderly persons.

The total number of severely and moderately depressed elderly persons found in a randomly selected community sample was matched with a group of non-depressed elderly persons on age, sex, marital status, socio-economic class, social support, type of accommodation, previous and present employment, living arrangements, physical morbidity and number of life events. The hypothesis tested was that depressed subjects would differ from non-depressed subjects on the development and functioning of their premorbid personalities. The two groups thus were assessed on the following scales:

i) The first was a factor analytically based scale, the Eysenck Personality Inventory (EPI). This scale was administered using a modification which has been shown to greatly reduce the effect of the present mental state, thus being a measure of the functioning of the premorbid personality (Kendell and DiScipio, 1968).

ii) The second scale, the psychodynamically based Psychosocial Index (PSI) which measured both present functioning as well
as well as the development of the personality, from birth to the present. It thus involved a retrospective account of the subject's history. Dimensions measured were Current Adjustment, Condition at Birth, Development and Functioning, Stress, Significant Relationships and Current Family Functioning.

Results indicated that the two groups differed significantly on the Extraversion dimension of the EPI and the Current Adjustment, Stress, Significant Relationships and Current Family Functioning dimensions of the PSI.

Implications of these findings for both the prevention and treatment of depressed elderly patients as well as the limitations of this study are discussed. A number of recommendations are made for future research.
INTRODUCTION

For millenia, philosophers have tried to persuade their listeners that old age, like poverty, brings no necessary evils. However, their converts have been few. Goode (1971) contends that being old may give one the opportunity to practise serenity and exhibit strength in the face of adversity. A long life is seen by Birren and Renner (1980) as the proving ground for the significance of events, decisions and activities. It can encompass full health or crippling and terminal disease. Some people in their sixties seem "old". Yet the famous pianist Arthur Rubenstein at 84 says of old age ailments, "Forget them, eat four lobsters and caviar, drink champagne and do not be afraid to marry if you are alone. Every day brings a new adventure." (Quoted in Genn, 1971: 354).

However, our society does not pay much respect to the elderly unless they "contribute". Our era is "the age of youth" and the elderly can be categorized as a "minority group" as they rarely share in the advantages enjoyed by the majority. Furthermore, prejudices restrict opportunities for the elderly to achieve personal satisfaction and participation in the entire range of activities open to other members of society (Busse and Pfeiffer, 1977). Organizations like the "Gray Panthers" in Philadelphia, U.S.A., attempt to advance the cause of the aged and challenge stereotyped images of older people, enhancing their mental and emotional being through active involvement in significant efforts on behalf of themselves and others (Lowy, 1980). The fact that by the year 2000, 9% of the world population will be 65 years of age and older (approximately 580 million) (Busse and Blazer, 1980), must prompt more research and teaching in areas related to mental health and ageing.
Social welfare and government policy, the arts and philosophy, all express beliefs and attitudes regarding ageing. In South Africa, a special act provides for "... the protection and welfare of certain aged and debilitated persons, for the care of their interests" (Department of Health, Welfare and Pensions, 1981). The scientific study of the processes of growing old is known as gerontology (Greek gerón, -ontos; meaning an old man). A related term is geriatrics (Greek gēras - old age and iátros - physician) referring to the medical care of the aged. Gerontology involves natural and behavioural sciences and has become a modern, sophisticated discipline involving physical, psychological and social aspects.

Yet ageing is often seen as both terrifying and depressing. This is aptly illustrated by Simone de Beauvoir (1971) who tells of the young Buddha, Prince Siddartha, who would often leave his beautiful palace and ride into the countryside. The first time he went out he saw a tottering, wrinkled, white-haired, decrepit old man who was bent over, trembling and mumbling incomprehensibly while he propped himself up on his stick. The sight astonished the prince and the charioteer told him just what it meant to be old: "It is the world's pity", cried Siddartha, "that weak and ignorant beings, drunk with the vanity of youth, do not behold old age! Let us hurry back to the palace. What is the use of pleasures and delights, since I myself am the future dwelling-place of old age?" (de Beauvoir, 1972: 1).

Ageing usually refers to processes of change in organisms which occur after maturity, whereas old age refers to the last phase of life. Many definitions focus on limitation of functions in old age. Alex Comfort (1956) for example, defines senescence as "... a change in the behaviour of the organism with age, which leads to a decreased power of survival
and adjustment" (Comfort, 1956: 90). Similarly, Handler (1960, in Birren and Renner, 1980), holds that:

Aging is the deterioration of a mature organism resulting from time-dependent, essentially irreversible changes intrinsic to all members of a species, such that with the passage of time, they become increasingly unable to cope with the stresses of the environment, thereby increasing the probability of death. (Handler, 1960: 4).

Busse (1977) speaks of "primary ageing" which he sees as being rooted in heredity. This is a process of inborn and detrimental changes, that are time related but independent of stress, trauma or disease. These are not always recognisable in all people and those changes that are present do not progress at the same rate. Disabilities resulting from trauma and disease he refers to as "secondary ageing".

A more satisfactory perspective is provided by Birren and Renner (1980). They found that because all aspects of the human organism are not necessarily in close synchrony during ageing, it is useful to distinguish three ages:

i) biological age, referring to life expectancy;

ii) psychological age, referring to the adaptive behavioural capacities of the individual; and

iii) social age, referring to the social roles of an individual with regard to the expectations of his group and society for someone of his age.

These "ages" interact and are interdependent, but one may certainly be old in body and young in spirit. Birren and Renner take all three
of the above aspects into account in their definition that:

Ageing refers to the regular changes that occur in mature, genetically representative organisms living under representative conditions as they advance in chronological age

(Birren and Renner, 1980: 4).

1.1 Biological Aspects of Ageing

(a) The issue of immortality

An interesting question has revolved around whether or not some animals are immortal, that is, whether they are capable of continuous and total cell replacement (Busse and Blazer, 1980). As immortality is assumed to exist in the lower, simpler forms of life, it has been held that some animal cells that are capable of dividing are immortal if removed from the body's regulatory mechanism. Alexis Carrel (1873 - 1944), who won the Nobel Prize for physiology and medicine in 1912, reported that he had continued a culture of chicken-embryo heart cells for thirty-four years. At the end of this period, these cells were growing with the same vigour and showed no evidence of depreciation over a period several times longer than the normal life span of a chicken. It later appeared that Carrel had fed the cell culture with a crude extract from chicken embryos, which contained very few, but a sufficient number, of living chicken cells. The introduction of these new fibroblasts permitted the culture to survive (Busse, 1977).

Hayflick (1974) supported his hypothesis that human cells have a finite capacity for replication and function by removing cells at regular intervals from his cell cultures and storing them at sub-zero temperatures under specific conditions. The cells, some of them preserved for twelve years, were then incapable of dividing. When they were removed from the sub-zero temperatures and returned to a culture
medium, they began to divide again. Regardless of the number of doublings reached by the population at the time that the cells were preserved, the summated total doublings was about 50. Thus the stored cells seemed to contain an inherent mechanism for "remembering" at what doubling level they were stored in the cold. When they were returned to a suitable environment, their capacity to duplicate took up at the point where it was interrupted. Hayflick asserts that this "in vitro" demonstration can be repeated "in vivo". By marking cells and injecting them into a host animal from which they can be withdrawn later and then re-injected into new host animals, a similar limit to the number of possible doublings can be demonstrated.

Although the issue of immortality versus finite capacity for replication is far from being settled, the immortality theory has currently lost ground. Although other experiments have suggested that animal and human cells have the capacity to be immortal, it has been demonstrated that all such immortal cell colonies are abnormal in one way or another (Weiss, 1974). However, if one accepts that deliberate biological programming takes place, it is unclear where the memory for these programmed changes is stored. The obvious site is the nucleus of the cell. Yet the erythrocyte has no nucleus. It appears to survive in the circulation for 120 days and there is no known way to increase its life span (Busse, 1977).

(b) Theories of finite capacity

A number of theories have taken Hayflick's (1974) postulate into account regarding the finite capacity that normal cells have for replication and function:
i) Exhaustion theory rests on the assumption that a living organism contains a fixed store of energy like that within a coiled watch spring; when the spring of the watch is unwound, life ends (Selye, 1970).

ii) The accumulation of deleterious material theory postulates that pigments, such as lipofuscin, accumulate in a number of living cells throughout the life span. However, there is as yet no evidence that the accumulation of these pigments actually affects cellular efficiency (Bondareff, 1980).

iii) The composite theory holds that somatic cell types differ from one another in frequency of cell division, some dividing frequently, e.g. epithelial cells; and some not at all, e.g. the neurons of the brain. Ageing thus involves the accumulation of defectively functioning cells in organs whose cells are non-dividing (Curtis, 1966).

iv) A fourth theory focuses on the immune system; the primary defense mechanism of the body which is essential for preservation of life. Alterations take place with time which shorten life expectancy and prolonged survival is seen as being associated with an immunologically elite population.

Wolford (1962, 1964) suggests that stimulation of autoimmune mechanisms, events in which the immune system attracts or rejects normal parts of the body, leads to immunochemical insults and decreased life expectancy.
1.2. Sociological Aspects of Ageing

Adjustment, satisfaction, self-esteem and social well-being seem to depend on three statements regarding the relationship between the elderly and the structure of society:

i) that the status of the aged is high in static societies, and this tends to decline with the acceleration of social change;

ii) that the aged are most highly valued in societies in which they are scarce;

iii) that the status and prestige of the aged are high in those societies in which older people continue to perform useful and socially valued functions, in spite of their physical problems.

The most well-known theory of ageing and society is the so-called "disengagement theory" (Cummings and Henry, 1961), which contends that only those older people who accept a reduction in social and personal interactions are usually satisfied in old age.

The activity theory of ageing postulates the opposite, i.e. that the maintenance of activities is important to most people as a basis for deriving and sustaining satisfaction, self-esteem and health. Palmore (1968) contends that those who reduce their activities as they age tend to suffer reduction in overall satisfaction.

There is considerable support for both these theories and one cannot ignore the fact that there are differences in patterns of living where some people tend to maintain relatively high or relatively low levels of activity.
1.3 Psychological Aspects of Ageing

These theories are usually an extension of developmental theories into middle or later life. The most well-known are the developmental stages of Erikson (1956) which end with the eighth stage describing old age, entitled "ego integrity versus despair and disgust."

This refers to the psychological processes of working through involuntional losses and taking a final position vis-a-vis one's past life and necessity of death. The developmental task is the resolution of involuntional grief and the acceptance of losses. If there is successful completion of this developmental task, a state described by Erikson as "ego integrity" is brought about. If there is failure to resolve involuntional losses, varying degrees of psychological decompensation will take place and despair may result. Integrity can thus be described as the acceptance of one's life and the significant people in it as inevitable and one's own responsibility.

One is faced with the task of integrating life and death. Successful resolution of this crisis places one beyond anxiety into a realm of serenity. Because of its transcendental nature, this theory has a certain heuristic utility. Although little can be said of stage theory from a scientific point of view, it has achieved great popular appeal.

1.4 Processes of Ageing

(a) Normal processes

Change during senescence is inevitable and is seen by Weinberg (1980)
as a crisis in slow motion. The change may be imperceptible but gradual and progressive and is affected by genetic inheritance, physiological, psychological and socio-economic vectors.

(i) **Physical**

It has been found that the trunk shortens, and there are muscular changes involving loss of elasticity and atrophy because of disease and irreversible shrinking. Greying of hair, loss of hair and teeth, elongation of ears and subcutaneous fat losses are common. Impairment of hearing and sight often occurs. However, with regular medical examinations and adequate nutrition, the decline may be less acute (Rossman, 1980).

(ii) **Intellectual and emotional changes**

Eisdorfer (1965) states that empirical data concerning intellectual changes in the aged are both complex and contradictory. The rapid decline in intellect is not inevitable if good physical and mental health and adequate intellectual stimulation are present. The evidence that older persons show a loss of recent memory and have impaired learning ability is equivocal.

The elderly are also regarded as being slow thinkers, rigid, irritable and dependent (McTavish, 1971). These changes seem related to personality traits and will be dealt with in Section 2.6.

(b) **Pathological processes**

The elderly frequently suffer more major disorders, both physical and psychiatric, than other age groups. They also show more modifications
of patterns of disease as compared to younger adult patients (Hodkinson, 1975).

(i) Physical pathology in the aged

Accurate diagnosis in the aged is just as essential as in any other group as their diseases are often just as treatable. However, difficulties arise with history-taking and physical examination which render accurate diagnosis more difficult. Appendix A outlines in detail the physical disorders common in the aged, including the symptoms and treatment.

This section will deal briefly with the way disease presentation in old age differs from that in younger adults.

Multiple disease

Traditional medical teaching has laid great stress on the importance of synthesising all the findings of history, examination and investigation towards a single unifying diagnosis. The approach is seen by Hodkinson (1980) as quite inappropriate to the elderly patient and can mislead the physician. Older people often accumulate diseases that can be controlled but not cured, such as pernicious anaemia or myxoedema. They may have diseases which have a frequency increasing with age such as malignancies, stroke or new diseases that arise against a background of pre-existing diseases or disabilities. Multiple disease and disabilities may interact so that a number of minor lesions, which would not be important individually, become significant in combination.
Altered responses to illness:

Pain

Diseases which might be quite painful with younger persons may be totally painless in old age. For example, a myocardial infarction may be painless as compared with the usual severe paralysing pain experienced in younger patients. This may be attributed to stoicism (Hodkinson, 1980) or some change in the physiology of pain appreciation (Isaacs, 1982).

Temperature

Collins et al (1977) found that even when gross infections are present, temperature does not rise and the presentation may be insidious or non-specific. They attribute this to decline in thermoregulation with age. Symptoms such as a modest increase in pulse or breathing rate may have to be relied upon.

"Missing" diseases

Severe hypertension, severe bronchitis and emphysema are common in middle life, but are rarely seen in old age except in much milder forms. Although a high degree of susceptibility remains to new strains of influenza, other viral infections are rare, e.g. infective hepatitis. Hodkinson (1980) states that this phenomenon reflects alterations in the immune status of the elderly.

ii) Psychiatric pathology in the aged

Weinberg (1980) argues that the concept of simple causality is
inadequate for psychiatric theory in old age. This has come about because of increased knowledge of the relation between the individual and the significant environment around him, thus placing psychiatric illness in a broader social context. Some of the dysfunctional features of old age can therefore be seen in the light of physical and psychosocial difficulties. There are a number of symptoms in the elderly which might lead one to suspect that there is psychiatric pathology present. Appendix A outlines in detail the common psychiatric disorders in old age.

**Forgetfulness**

A generous allowance is often made for forgetfulness in old age, and Hodkinson (1980) warns that it is easy to make this error when the forgetful old person has preserved an excellent social facade. Deterioration of memory may be a sign of a number of psychiatric conditions, including dementia, depression, head injury, alcoholism or hypothyroidism. A diagnosis often missed is that of injurious use of medication.

**Confusion**

This may be of an acute or chronic type. Patients with acute confusion exhibit clouding of consciousness, impaired memory, disorientation, restlessness and rambling speech. Hallucinations and aggressive behaviour may be present (Slater and Roth, 1974). Chronic confusion is seen in patients with intractable heart, renal or hepatic failure although a proportion is due to the dementing process (Hodkinson, 1980).
Apathy

This is often due to depression of a mild or severe variety, although it may also be a sign of dementia, and therefore the symptom constellation would be a crucial factor (Zung, 1980; Pitt, 1974).

Anxiety

Although this is a natural reaction to stress, morbid anxiety and agitation may indicate psychiatric disturbances such as acute delirium, mania, dementia or depression. Endocrine disorders such as hypoglycaemia or thyrotoxicosis may precipitate anxiety, usually associated with agitation (Weinberg, 1980).

Hallucinations and delusions

These are often signs of a major psychiatric disorder such as a schizophrenic process. Common delusions may be of a somatic or nihilistic type. Hallucinations may be auditory, often evidence of a functional disorder. Visual hallucinations are more common in organic disorders (Verwoerdt, 1976).

Abnormal behaviour

Self neglect and sexual misdemeanours may be signs of a dementing process although it should be borne in mind that deterioration in standards may be the result of the elderly person being too proud to accept any outside help (Pitt, 1974). Fiegenbaum (1974), in a study of the attendance of elderly people to out-patient clinics and private practice, found that when clinicians replace stereotypic attitudes
with a thoughtful consideration of underlying pathology, and treatment goals are formulated in the context of good psychiatric practice, the elderly can profit from contact with psychiatry.

1.5 Depression

1.5.1 Definitions

Depression is difficult to define in a precise way. Someone is said to be depressed when he describes his feeling state as low-spirited, "blue", sad, grievous or unhappy. This description is not adequate for a diagnosis of clinical depression. The Psychiatric Glossary (American Psychiatric Association, 1975) defines depression as follows:

- Slowed thinking and decreased purposeful physical activity accompany the mood change when the term is used diagnostically. This definition indicates that depression is a state of both mood change and reduced activity.
- Persistent grief feelings make up a clinical depression only when accompanied by marked reduction in activity.
- In many severe cases, this reduction involves the above-mentioned obvious slowing of thinking and movements.
- In other cases, often equally severe, the diminution of activity is only related to withdrawal from previous fields of interest.

While this definition provides a satisfactory description of the condition, there are a number of other symptoms recognized as depressive in nature that are excluded. For example, self-accusation and somatic symptoms are excluded from the constituents of the depressive disorder.

Marked sadness without depressive behaviour reported by Hogarty and Katz. 
(1971) as making up a notable minority in the normal population is also excluded from the realm of clinical depression. Normal grief, low morale (Kutner et al, 1956) and low life satisfaction (Neugarten, Havighurst and Tobin, 1961) do not include diminution of activity and hence are not synonymous with this definition, although they may frequently overlap with mild depression. In the absence of a consensual operational definition, depression may be viewed both as a reactive mood disturbance accompanied by failure of adaptation as well as disease, in the sense that its manifestations are deviations from normal biological function (Hill, 1968; Klerman, 1971).

Disregarding the problematic question of aetiology as of secondary consequence in many cases of depression with a prolonged course, a development takes place in old age depression towards increasing somatization which reinforces the disease character of a depression (Epstein, 1976).

1.5.2 Depression in the elderly

1.5.2.1 Historical background

In the 5th Century B.C., Hippocrates explained depression as an alteration of the brain by black bile (melan - black; chole - bile; melancholia), one of the four humours which determined man's temperament and health. Greek and Roman physicians also reported the prevalence of melancholia as intrinsic to advancing age and believed it to be most common amongst the elderly (Willmuth, 1979).

During the Middle Ages, the development of rational, empirical, medical thought and practice was arrested and demonology had a great influence
on physicians of the time. As historian Charles Mackay asserted, "it was sufficient to be aged, poor and ill-tempered to ensure death at the stake or on the scaffold" (quoted by Willmuth, 1979 : 496) and women of the period often prayed to die young, rather than risk growing old. It is easy to imagine how depressed, deluded old people with their pre-occupations of fanciful sexual sins and fantasies of having brought harm to family and neighbours participated in their own persecution and destruction. An English physician, Reginald Scot (1538 - 1599), believed that witches were mentally ill

"... so as, what mischeefe, mischance, calamitie, or slaughter is brought to passe, they are easily persuaded that the same is done by themselves, imprinting in their minds an earnest and constant imagination heretof. They are lean and deformed, shewing melancholie in their faces, to the horror of all that see them"

(quoted by Willmuth, 1979 : 497)

During the seventeenth and eighteenth centuries, the clinical arts of bedside observations and description were greatly advanced and because the ancient humoural theory was superceded, melancholia was seldom referred to as a condition typical of old age. The nineteenth century concept was that depression in old age was the first stage of all mental illness, and dementia the common last stage. It was only during the modern period that epidemiological studies confirmed that depression is the common disease of the elderly and is often self-limiting. However, misconceptions and unwarranted pessimism persist and maintain attitudes and beliefs about depression in the elderly which result in neglect and poor care (Schmidt, 1974).
1.5.2.2 Classification

The diagnostic dilemma of depression has for a long time revolved around whether it should be regarded as two discrete entities (endogenous or reactive) or whether they constitute the respective endpoints along a continuum (Zung, 1980; Blazer, 1982).

The term "endogenous" is used in an ambiguous way in psychiatry. Etymologically, endogenous means "of internal origin", the opposite of "reactive". However, endogenous denotes a particular syndrome which is a "psychotic" one of depressive mood, retardation and diurnal rhythm. Used in this sense, the opposite of endogenous is neurotic. Endogenous depressions can therefore correlate with but are not identical to reactive depressions. One should therefore qualify by saying "endogenous in the aetiologic sense" or "endogenous in the symptomatological sense" (Stenback, 1980).

Many authors find it difficult to uphold a qualitative difference between psychotic and neurotic depressions, and view the difference as a question of severity. Protagonists for this view who conceptualise depression on a continuum include Lewis (1971), Kendell (1968), and Hill (1968). Protagonists for the endogenous-reactive dichotomy include Kiloh and Garside (1963) and Fahy et al (1969).

Slater and Roth (1974) consider depression in old age to belong to two main types, firstly endogenous depression with its clinical similarities to manic-depressive disorder with the following main symptoms:

1) psychomotor retardation;
ii) guilt;
iii) self depreciation;
iv) hypochondriacal ideas or somatic delusions, and
v) diurnal variations.

The second, neurotic depression, they view as reactive to physical illness or social and economic stress and deprivation. The emotional disturbance is usually less profound, a clear diurnal variation of mood is not characteristic and initial insomnia is present.

Attempts to differentiate manic-depressive type of depression and the neurotic type are probably, in the view of Goldstein (1979), thought to be futile, as precipitating factors usually become evident after thorough investigations.

1.5.2.3 Epidemiology

Community studies of the elderly have demonstrated that depression is relatively common (Kay et al, 1964). One to two percent of their group suffered from severe affective disorders and 8-12% from affective disorders of a milder neurotic and reactive type. Williamson et al (1964) noted that most patients with depression were not recognised as such by their general practitioners and when psychiatric morbidity was found, sedations and tranquillizers were offered rather than referral to the psychiatric services. It has been postulated that the type of depression occurring among elderly people living at home, and which seems to pass unrecognised and unrelieved, represents a relatively benign form of the disease. However, in follow-up studies of the two Newcastle samples (Kay and Bergman, 1966; Kay et al, 1970)
The term "dysphoria" has been used to describe aged persons who are unhappy, dissatisfied or disgruntled, and who often exhibit disturbed or maladjusted behaviour. These persons are usually found in residential care and are described by the staff as being their most difficult charges. Blazer and Williams (1980) found a difference between the incidence of dysphoric symptoms and depressive disorder as defined by the DSM III. They consider that what is often called depression in late life actually represents decreased life satisfaction and periodic episodes of grief secondary to the vicissitudes of old age. A study by Gillis and Zabow (1980) provided partial evidence for regarding dysphoria as a special entity. They found differences in life satisfaction and in perception of financial matters. The dysphorics scored higher on the former scale and lower on the latter scale. The researchers admit that their findings beg more answers than they provide especially with regard to aetiology. At present this term is not used by the authoritative International Classification of Diseases (World Health Organization, 1978). Thus, there does seem to be a consensus that depression in the aged tends to take a form which is different from that usually found in younger persons, although there may be some disagreement regarding the emphases of various symptom patterns.

The following table from Zung (1980) incorporates both the general signs of depression as well as those specific to late life. He regards them as core signs and symptoms which may be followed for the diagnosis of depressive disorder in the elderly. He argues that they are universally recognized and understood by researchers in this field.
### TABLE 1

| 1. PERVASIVE AFFECT       | a. depressed, sad                        |
|                          | b. tearful                                |
| 2. PHYSIOLOGICAL DISTURBANCES | a. diurnal variations                      |
|                          | b. sleep, early and frequent waking.      |
|                          | c. appetite, decreased                    |
|                          | d. weight, decreased                      |
|                          | e. libido, decreased                      |
|                          | f. fatigue, unexplained                   |
|                          | g. constipation                           |
|                          | h. tachycardia                            |
| 3. PSYCHOMOTOR DISTURBANCES | a. agitation                              |
|                          | b. retardation                            |
| 4. PSYCHOLOGICAL DISTURBANCES | a. confusion                             |
|                          | b. emptiness                              |
|                          | c. hopelessness                           |
|                          | d. indecisiveness.                        |
|                          | e. irritability                           |
|                          | f. dissatisfaction                        |
|                          | g. personal devaluation                    |
|                          | h. suicidal ruminations                    |


#### 1.5.4 Depression and dementia

The symptoms of depression are often confused with those of dementia. Diagnostic discrepancies also exist between clinicians who define these terms differently. Wells (1979) suggested that clinicians were incorrectly labelling individuals with depression as demented.
The term "pseudodementia" is a term applied to the clinical condition appearing in elderly patients with depression and apparent transient cognitive impairment. In other words, dementia is mimicked, or caricatured, by depression. Patients respond to the mental status examination in a way similar to those with true degenerative brain disease (Blazer, 1982).

Wells (1979) presented a thorough examination of the problem of pseudodementia and compared the clinical features with that of true dementia. He presented the following as distinguishing characteristics:

<table>
<thead>
<tr>
<th>Dementia</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insidious and indeterminant onset</td>
<td>Rapid onset</td>
</tr>
<tr>
<td>Symptoms usually of long duration</td>
<td>Symptoms usually of short duration</td>
</tr>
<tr>
<td>Mood and behaviour fluctuate</td>
<td>Mood is consistently depressed</td>
</tr>
<tr>
<td>&quot;Near miss&quot; answers typical</td>
<td>&quot;Don't know&quot; answers typical</td>
</tr>
<tr>
<td>Patient conceals disabilities.</td>
<td>Patient highlights disabilities</td>
</tr>
<tr>
<td>Cognitive impairment relatively stable</td>
<td>Cognitive impairment fluctuates greatly</td>
</tr>
</tbody>
</table>

(Wells, 1979).

1.6 Aetiology

Bergman (1982) observes that in looking for causes of depression in late life, the investigator finds himself embarrassed by the large number of necessary and apparently serious "causes" which can present themselves. Yet a substantial number of elderly persons remain free of depression in
spite of suffering from the stresses of bereavement, poverty, poor housing, decline in social status, social isolation and ill-health; factors often assumed to provide sufficient explanation for a depressive illness.

Blazer (1982) provides a useful model for understanding the development of depression in late life. This model takes cognisance of the futility of searching for a cause or external agent responsible for this condition and introduces "chains of causation".

The following interactive factors are included in the schema:

i) Intervention and developmental factors.
ii) Reference factors, e.g. increased age.
iii) Environmental factors, e.g. increased social stress or decreased social support.
iv) Physical health factors.
v) Unconscious psychic factors, e.g. decreased perceptual awareness of the environment.
vi) Conscious psychic factors, e.g. guilt feelings.
vii) The self involving a poor self image.

These factors lead to the behavioural factor, depressive symptomatology.

The following section contains a discussion of factors associated with the aetiology of depression, providing a pertinent rather than a comprehensive view of the problem.

1.6.1 Biological factors

There is an increasing body of evidence supporting the view that the
aged are more prone to depression because of biological factors (Grauer, 1977). Much of the biological hypothesis of depression originates from an attempt to explain the changes associated with medication, e.g. the euphoriant action of monoamine oxidase inhibitors and the antidepressant effect of the tricyclic group of drugs. An increase in monoamine oxidase (MAO) activity in both plasma platelets and in the human hindbrain with increasing age has been reported (Lipton, 1976). This may be associated with the availability of MAO which is inversely proportional to the level of oestrogen. Subsequent to menopause, the level of oestrogen decreases and the level of MAO rises. MAO, an enzyme, is involved in the metabolism of norepinephrine, low levels of which, in brain tissue, are associated with depression.

Circadian rhythm theory takes cognisance of the fact that almost every body function has a rhythmicity, including the function of neurotransmitters. For example, norepinephrine turnover in the brain may vary markedly during the day (Blazer, 1982). Wehr et al (1980) report that depression varies with the circadian rhythms of 3 methoxy - 4 hydroxyphenol glycol (M.H.P.G.) which is a metabolite of serotonin and catecholamines, both of which substances are associated with depression and mania. Stenback (1980) argues that disturbances in catecholamine metabolism can be correlated with a sense of prolonged failure in central life tasks. The shock effect inherent in the loss experience of a significant person implies reduced behavioural activity and its concomitant reduced catecholamine synthesis.

Elderly people have also been found to differ from younger adults in their sleep pattern. There is evidence that they dream less frequently and for shorter periods during the night with consequent REM
sleep deprivation (Grauer, 1977), a factor shown to be associated with depression (Vogel et al, 1977). This view has been supported by Raffwarg et al (1966) who studied the problem of the sleep E.E.G.

In spite of these hypotheses, the results obtained in studies of depressive subjects appear to be equivocal and controversial. The major difficulty seems to be the aetiological heterogeneity of depression, despite considerable similarity in symptomatology (Busse and Pfeiffer, 1977).

Blazer (1982) cautions that the psychobiology of depression is highly complex and cannot be limited to a simplistic model of neurophysiological changes. Therapeutic intervention at the neurophysiological level in the form of psychopharmacology occurs within a psychosocial context and cannot be divorced from it.

1.6.2 Physical factors

Physical illnesses have for a long time been associated with depressive disorders (Roth and Kay, 1956). Bergman (1975, cited in Bergman, 1982) in a follow-up study of day hospital patients, showed a significant relationship between depression and physical disorders. Another source of indirect evidence of the relation between depression and physical illness is a longitudinal community study conducted by Kay and Bergman (1966). In a forty-two month follow-up period they found a higher mortality rate among functionally disordered subjects, including depressives, than in non-disordered controls.

Zung (1980) in a review of a number of studies in the area, found that the depressed subjects scored the highest on an index of physical ill-health and spent more days sick in hospitals or nursing homes than a
healthy volunteer group. In addition, they produced lower self-ratings of their health, as projected five years into the future.

Given that elderly depressives are frequently also physically ill, it is possible that the affective disorder may not be recognised. Epstein (1976) points out that it may be difficult to identify depression when the mood disturbance is regarded as appropriate for a physically ill person. Many of these patients suffer a neurotic type of illness, with the clinical picture including a blend of behaviour and somatic complaints. Although hypochondriasis may seem somewhat of a misnomer when applied to patients who are in fact suffering from some physical illness, it is frequently hard to tell, in elderly patients, whether complaints of pain and discomfort are primarily physical or psychiatric in nature. They may indeed be both. It seems therefore, that the interrelationship between depressive disorders and physical illness must be recognized and understood if intervention is to be effective (Murphy, 1982).

1.6.3 Social factors

In old age, bereavement, loss of income, status, friends, or social contacts have all been cited as significant factors in depression. For persons past the age of 60 years, losses are often more numerous and visible, whereas gains are fewer and less apparent (Busse and Pfeiffer, 1973), for example, the loss of fulfilling employment in exchange for a minor gain such as a railways concessionary scheme or "senior citizens" discounts. Given additional stresses such as physical infirmity, these losses may become difficult to tolerate. The elderly are subjected to many changes within themselves and their environment. The core prob-
lems seem to be an inability to handle external losses as well as disturbed perception of external and internal changes (Pitt, 1974).

The study of the relationship between environmental stress and the development of depression has been of considerable interest in recent years (Paykel, 1970; Jacobs, Prussof and Paykel, 1974; Ilfield, 1977). In view of the fact that depression in the senium is often a first-time event, the question of whether this type of depression is secondary to environmental changes, has been raised.

The elderly are considered to be at a greater risk for stressful life events, which may involve loss of employment, or spouse, or friends. This is coupled with the stereotype of the aged as dependent, roleless, querulous and forgetful. Researchers such as Lowenthal (1965) and Cobb (1976) investigated the importance of factors in the social environment that might modify the adverse consequences of environmental stress. Support functions of the social environment appeared to be one of the most important factors, and the term "social support" was coined. This refers to "... the provision of meaningful, appropriate and protective feedback from the social environment to the person that enables him to negotiate intermittent or continual environmental stressors" (Blazer, 1982 : 94). However, defining and measuring social support may be even more problematic than defining and measuring social stressors, and an adequate understanding of social support necessitates an understanding of the nature of the social environment itself. While the contributions of social factors to depressive disorders in late life is firmly established (Palmore, 1968; Shanas, 1979), the details of this relationship have yet to be resolved.
1.6.4 Psychological aspects

Blazer (1982) sees two major issues underlying psychological aspects of the aetiology of depression in late life. The first concerns the question of whether there is a difference between depression with onset in late life and depression with onset at earlier stages of the life cycle. The second involves the actual psychological mechanisms of late life depression.

Most writers (Epstein, 1976; Zung, 1980; Bergman, 1982) would answer the first question in the affirmative (see Section 1.5.3). The second issue seems more problematic. While it would be overstating the case to say that older people have specific psychological mechanisms associated with their depression, it is possible that changes in perception, memory and motor performance may all serve to modify psychological mechanisms. However, in order to examine this, it is necessary to discuss the dynamics of depression in some detail.

1.6.4.1 Psychodynamic approaches

Because depression is usually characterized as a mood disturbance associated with reduction of activity, its aetiology has to be sought in factors influencing both mood and activity (Zung, 1980). Loss is recognized as a principal aetiologic factor. By this is meant an observable deprivation of an object that is of high value for the subject, an object that is, as psychoanalysis puts it, cathexed. When estimating the emotional impact of a loss, the personal meaning of the loss and its consequences must be taken into account. Although most people can cope with a loss, the critical question concerns the reason for which the prospective depressed patient is unable to rise after the
severe blow.

Normally after a period of mourning, new and old objects of interest receive even more attention and gradually the mental pain abates. When depression ensues, a number of psychic processes take place. The lost object remains a cathected object. In his inner world, the patient has not accepted the loss. This implies that thinking and feelings are still directed towards the lost object. Under the emotional impact of the loss, withdrawal from external reality takes place, reducing the opportunities for finding new external cathected objects. But the seeking of new sources of satisfaction starts sooner or later. When this seeking fails, anxiety, despair, helplessness and aggressiveness of various degrees ensue. The person is unable to recathect. The premorbid personality must be seen as a crucial factor in the failure to deal with loss (Zung, 1980; Blazer, 1982).

When one considers depression in later life, in addition to failure to recathect, there is an inability to make new objective ties and replace old ones. However, the reaction seems to be out of proportion to the precipitating factor. A vicious circle of increasing feelings of worthlessness and regression is initiated. The elderly become afraid of failure and damage to their self-esteem. They also avoid tasks for which they feel ill-prepared (Stenback, 1980). Bergman (1982) mentions that with physical ageing, the elderly often need to mourn the loss of the person they used to be.

Freud, in 1917, explored the psychology of depression in the classic paper "Mourning and Melancholia" (Freud, 1917). He described ego identification with the lost object and a subsequent turning of frustration and anger originally directed at the lost object onto the
self. In the successful mourning process there is less ambivalence, or outright hatred, felt towards the lost object and therefore less self-hate.

This widely held theory thus holds that depression is a pathological response to the loss of a person or object that has been regarded ambivalently. The lost object is introjected into the self and hostile impulses are directed toward that object in the form of self-accusations, self-blame and guilt. It would appear that in the depression of old age guilt is, in general, a relatively unimportant dynamic force. It seems to play a more prominent role in the depression of young people and in the more severe agitated psychotic depression in old age to the degree that depression is not related to biological factors (Epstein, 1976).

Depression may also occur in response to the "loss of narcissistic supplies" (Goldstein, 1979). Here the person feels that he has lost everything and that nothing remains. Frustration tolerance is low, and various techniques are employed, including submission, manipulation, coercion, demands and placating in an attempt to maintain desperately needed relationships.

Although psychodynamic theorists have paid special attention to those factors predisposing to depression throughout the life cycle, research on the lifelong patterns of reaction and potential for depression in the elderly has been scanty.

1.6.4.2 Learning theories

The most widely-known behavioural model of depression is the model of "learned helplessness" (Seligman, 1975), which was first used to describe
the process believed to underlie the behaviour of dogs when subjected to inescapable shock. When dogs were given repeated inescapable shocks, they seemed to give up and passively accepted the shock. When they occasionally did escape, they failed to learn this behaviour. Seligman reviewed the similarities between behaviours characteristic of learned helplessness and that of the symptoms of depression. As learned helplessness is caused by learning that responding has no effect on reinforcement, this model suggests that depression arises because of the expectation that initiating action in the social environment is futile.

The learning theory model, depending on reinforcement, involves the environment in a central way. This aspect has been used by Goldfarb (1974) who has devised a "psychodynamic" sequence of events to explain depression which is in part related to the learning approach of Seligman. Solomon (1981) has elucidated and expanded Goldfarb's model in the following way to include the greater social environment:

Figure 1

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Multiple Stressors → Mastery → Helplessness → Fear/Anger/Loss

Adequate Coping Skills → Problem-solving
Inadequate Coping Skills → Symptoms
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(Solomon, 1981: 15).

The aged person feels a decrease in his ability to master the external environment because of biological, psychological and social factors.

(a) Helplessness

This can be seen as both an affect and a behaviour. Learned helplessness occurs when the response outcome is independent of the
subject's response. Even if the response of the subject is appropriate, this will not be reinforced by his environment.

If there is no control over the response outcome, apathy, helplessness and a consequent lack of response will occur. Coupled with this is the existence of the stereotype of old people, including the belief that they have limited abilities and interests, are in poor physical condition, are not important to the family and have various negative personality traits (McTavish, 1970). They are also regarded as insecure, asexual, and mentally deteriorated (Thomae, 1980).

Simon and Wilson (1975, in Solomon, 1981) found that nurses who viewed patients as dependent and in need of care, reinforced the sick role, as well as the psychopathologically dependent behaviour and negatively affected socially-appropriate behaviour in their patients. This means that society may respond only to custodial and maintenance needs of the older person as it is seen by the caring profession. This may be construed as increased helplessness when it may be the function of the need of the caretakers, rather than that of the older person. Perceived loss of control may lead to the older person giving up.

Behavioural responses to all stimuli may then become haphazard and independent of response outcome which reinforces the stereotype and decreases expectations of the older person. This in turn leads to decreased motivation, greater dependency and increased helplessness (Solomon, 1981).

(b) Rolelessness:

Rosow (1975, in Solomon, 1981) has noted that increasingly tenuous
and informal roles have been given to old people in industrialized societies. These are generally peripheral and exclude the elderly from the mainstream of society. However, the elderly are still tied to the predominant modes of production and consumption and are constantly reinforced by messages of social obsolescence, e.g., compulsory retirement and inadequate pensions. The older person later believes that he is no longer part of society. He begins to internalize the stereotype and acts accordingly, thereby further reinforcing the stereotype.

Rolelessness leads to feelings of alienation and anomie, both of which can be associated with depressive symptomatology. Self-blame that occurs with the stereotype and self-victimization accompanied by loss of esteem has been postulated to be an important dynamic factor in depressive symptomatology. Because there is no way to direct anger associated with chronic victimization towards an external object, it is turned inwards and becomes another psychodynamic factor in depression. Deep feelings of loss, with subsequent mourning and depression, are stimulated by loss of social role.

There is thus dependence upon the ebb and flow of the environment, which increases helplessness. This leads to frustration and anger at not coping with consequent fear of the environment. If the person has previously coped adequately with stress, he should be able to compensate for his helplessness and decreased mastery with the strengths gained by previous achievements and the effect may be transitory. If there is failure of the support system, or a neurotic predisposition in the personality, or if a greater number of stresses occur, the person may develop pathological symptoms (Rosow, 1975, cited in Solomon, 1981).
1.6.5 Loss in late life depression

Throughout the exposition on aetiology a common theme, that of loss, is evident in psychobiological, physical, social and psychological spheres. Within the psychological approach, MAO levels increased as a result of decreasing levels of oestrogen (Lipton, 1976). Loss of physical health was seen to be a factor in late life depression (Zung, 1980; Bergman, 1982). Social factors in aetiology stressed the loss of social support, including significant relationships and status (Busse and Pfeiffer, 1973; Ilfield, 1977). Both major psychological approaches, psychodynamic (Freud) and learning theory (Seligman, 1975; Solomon, 1981) regarded loss as a direct and crucial cause of depression.

Thomae (1980), in an extensive review, concluded that the loss of external love objects is a principal aetiologic factor in depression. He maintains that disagreement among researchers exists only with regard to the scope and sufficiency of loss. Some of the more important losses he lists are those of status, income, health, company, independence, accommodation and lastly, of life. With regard to loss of life, he stresses that elderly persons should not be regarded as more ready for death than younger persons. If death is not faced and come to terms with, it contributes to depression.

Loss has been conceptualized by Zung (1980) on three levels: real loss, where the lost object is unavailable and inaccessible; threatened loss, where there is potential loss, and the person has to deal with the anticipated loss before it actually takes place. Finally, fantasized loss exists where there is no basis in reality for the loss. This results from an exaggeration or misinterpretation of the environment to mean loss. These three kinds of loss are equally important as stressors.
Thus, if the aim of aetiological research is to contribute to effective therapeutic intervention, any such research must take cognisance of the role of loss in all its facets.

1.7 **Treatment of depression**

1.7.1 **Psychotherapy**

Tuason (1973) cautions that the immediate impulse to prescribe drugs for depression in late life must be tempered by the principle of making haste slowly. He maintains that one third of depressive disorders can be dealt with psychotherapeutically. This will promote clarification of the patient's condition and careful history-taking may suggest that he has already experienced the worst phase of his illness. Reassurance, support and a clear prediction of what the patient will experience are essential. The patient should probably be discouraged from making any major decisions as depressive illness colours the thinking process and decisions often become illogical and unreasonable. Pitt (1980) states, however, that severe agitated depression cannot be speedily dispelled by interpretation, although insight into the patient's internal conflict is very helpful to those who treat him. This will lead to realistic expectations of what could possibly be achieved. Increase in the patient's tolerance and understanding of himself by frank discussion may prove fruitful. There may also be the need to involve other members of the family. Steuer (1982) asserts that, although modifications of traditional techniques have been suggested, there are no psychotherapies specifically designed for the aged. She cites one of the main reasons for the reluctance of many psychotherapists to engage in therapy as being that the elderly are seen as poor investments of
time and energy, and hold out little hope for improvement. She adds that the therapist with negative stereotypes of old age will have difficulty in separating the patient's negative cognitions from reality issues.

1.7.2 Physical therapies

1.7.2.1 Pharmacological treatment

Rossman (1980) warns that older persons are at risk for problems secondary to potentially toxic effects of medication because altered physiologic, pathophysiologic and social factors render usual prescribing directions inadequate for the ageing. Factors such as absorption, excretion and drug interactions are of cardinal importance to the clinician. However, pharmacological therapy has significantly improved mental illness prognosis in older adults, and Blazer (1982) reports that tricyclic anti-depressants not only shorten the duration of depressive episodes but also decrease the remission rates from depressive disorders. The clinician should be aware of the symptoms likely to be reversed following administration of the medication. Antidepressant therapy should be evaluated periodically to determine whether reversal of symptoms has been effected by a given medication. The treatment regime should be as simple as possible, the medication being prescribed as infrequently during the day as possible.

The most widely used medications are the tricyclics of which amitryptaline (Tryptanol) in dosages from 25mg - 100mg a day are given. M.A.O. inhibitors such as Tofranil are less commonly used because of their ability to produce a hypertensive crisis when combined with foods with a high tyramine
content such as cheese, red wine and certain other medications. Yet Robinson et al (1972) suggest that they are more useful than the tricyclics because of the M.A.O. activity that accompanies the ageing process (Section 1.1).

Ancillary drugs which may be used are the minor tranquillizers such as benzodiazepines (e.g. Valium) or in cases of severe agitation, antipsychotic agents such as major tranquillizers (e.g. Largactil) (Bergman, 1982).

Blazer (1982) urges that as ageing is a dynamic process that not only changes through time but displays its diversity in different structures and functions within the body, drug therapy of the elderly must be considered within the same dynamic framework.

1.7.2.2 Electro Convulsive Therapy

Where the patient is suicidal and there has been no response to medication, electroconvulsive therapy (E.C.T.) is the treatment often prescribed. The action of E.C.T. appears to be physiological on the brain and is said to be remarkably safe. Pitt (1980) sees it as still the most effective treatment for severe depression and he considers it to be a life-saver. This view is supported by Goldstein (1979) although Tuason (1973) does not mention it in his treatment regime for depressives.

Busse and Pfeiffer (1977) suggest that hospitalization should always be considered when the patient is severely depressed. Two factors should be taken into account in this decision. Firstly, there is the risk of suicide which is higher in elderly depressives as compared to younger depressives. The second is that the depth of depression can be evaluated and treatment can be administered most effectively within a hospital setting.
1.8 Zung's triadic approach to the treatment of depression.

Figure 2.

Therapeutic outcome should be the main concern of those involved in treatment. It is thus important to understand both treatment successes as well as failures. Zung (1980) has proposed a model (see Figure 2) which represents a holistic attempt to emphasize the interrelationship between the various facets of treatment.

If one commences with "Treatment" (1) it is clear that treatment by itself does not cause a patient to be "Improved" (10). Treatment includes psychotherapy and/or physical treatments. This affects the patient's biological systems and "Internal Milieu" which produces "Changes in Cerebral Activities" (2). Zung claims that, regardless of one's approach to the aetiology of depression, the ultimate action of treatment on the somatic substrate is crucial. With regard to antidepressant medication, there is almost a one-to-one hypothesis which relates these compounds to the molecular structure of neurons (Hall, 1973).
Depression can be conceptualized as manifesting itself in three areas, "Affective Changes" (3), "Physiological Changes" (4) and "Psychological Changes" (5). It is predicted that changes in cerebral activities will affect all three areas. "Behavioural Changes" (6) are thus the end-result of treatment. Either symptomatic relief may be exhibited clinically or adverse reactions and complications may arise. These symptomatic changes, the result of treatment, are not in themselves sufficient to bring about the goal of an improved patient. They are only one of three processes which together lead to a therapeutic outcome. The decisive point in this model occurs when the other two of the three processes, "Premorbid Personality" (7) and "External Milieu" (8) enter into the schema. Premorbid personality includes the attitudes and expectations of the patient, conceptualized as the results of psychodynamic factors, which make the patient "himself". External milieu includes immediate helpers, such as the clinical team, as well as the family, friends, community and the physical environment.

Thus, behavioural changes, external milieu and premorbid personality, influence "Homeostatic Mechanisms" (9) producing a patient who is either "Improved" (10), "Unimproved/Worse" (11) and any understanding of the therapeutic outcome involves the understanding of all three processes. An attempt may then be made to influence them simultaneously, if at all possible.

This schema provides comprehensive guidelines for evaluating the treatment of depression. However, one of its shortcomings is related to the lack of detail regarding constituents of premorbid personality, as would appear to be indispensable to the schema. The following chapter attempts to clarify and highlight this aspect.
2. Personality in its relation to depression in late life.

2.1 The premorbid personality

While a number of writers acknowledge the importance of the premorbid personality in late life depression, detailed or specific information in this regard is not often forthcoming. Post (1972) in a study of hospitalized depressives dealt at length with the premorbid personality. He found that during old age, only a minority with an acquired predisposition would react to severe life stresses with a depressive illness.

Epstein (1976) emphasized that there might be certain adverse conditions that, prevailing over long periods, may predispose a person to depression in later life. The depression may be a culmination of life-long conflicts in particularly vulnerable individuals. Thomae (1980) sees the main task of man's psychological inner life as having to cope with his world, consisting of the biological, social and cultural factors operating at each particular moment. This coping capacity develops throughout life and coincides to a large measure with the premorbid personality. Some of these coping functions are especially needed in old age. The extent to which coping resources have been developed will have a decided bearing on symptom-formation during old age.

2.2 The study of personality

Samuel (1981) relates an incident concerning a 24-year old man who brought suit against his parents for wilful negligence in their child-
rearing practices. He was frequently unemployed and often admitted to psychiatric hospitals. He accused his parents of "intentional infliction of emotional distress" which had caused his inability to cope with life.

The lawsuit calls attention to the fundamental conflict in conceptions of human personality, i.e. the "person-situation" controversy in the field of personality psychology. The issue being debated in this controversy is whether the primary causes of behaviour are intrinsic desires, habits, expectations and biological processes or whether they are extrinsic in the pressures and learning experiences provided by the physical and social environment (Mischel, 1976).

A theory of personality refers to a set of basic principles intended to organize and explain a large body of evidence concerning human behaviour and thought (Janis et al., 1969). The origin of the person-situation controversy can be traced back to two somewhat incompatible theoretical viewpoints, psychoanalysis (person variables) and radical behaviourism (situation variables). Thus, psychoanalysis stresses the direct expression of instinctive impulses or the indirect expression of such impulses resulting from an effort of the conscious mind to exert control over its unconscious portions (Dare, 1981). Radical behaviourism maintains that events occurring inside the person are of little importance as causes of behaviour (Lowe, 1972).

Bowers (1973) stressed that both person variables and situation variables have an important effect on one's life and that they interact with each other in determining behaviour.

This controversy also enters into definitions of personality. Gordon Allport's (1961) often quoted definition is an example of a "person"
orientation; "Personality is the dynamic organization, within the individual, of those psychophysical systems that determine his characteristic behaviour and thought" (Allport, 1961: 28). On the other hand, Walter Mischel (1976) describes personality as "... the distinctive patterns of behaviour (including thoughts and emotions) that characterize each individual's adaptation to the situations of his or her life (Mischel, 1976: 2). Mischel thus stresses the "situation" variables in personality development.

Even with regard to personality measurement, projective approaches have been associated with the person variable and objective approaches with the situation variable. In view of the wide range in theories of personality, it seems appropriate to examine the main approaches and their associated assessments.

2.3 The psychoanalytic approach to the study of personality

2.3.1 Psychoanalytic models of personality

Dare (1981) argues that the concept of personality is so central to the nature of psychoanalysis that both therapeutic practice and theoretical models can be said to be almost exclusively concerned with personality. Furthermore, psychoanalysis has come to describe certain basic aspects of the workings of the mind which are, in fact, descriptions of personality functioning.

Freudian psychology is dualistic, in that it assumes two interacting spheres of behaviour, the psyche (mind) and the soma (body). Although there is disagreement regarding the exact contribution of biology (Rychlak, 1981), it nevertheless stresses a necessary tie-in of purely
biological functions to human behaviour.

Freud's first model of the psychical apparatus is known as the topographical model (Freud, 1915a, 1915b). This model conceives of the mental apparatus as being founded on a systemic distinction (Laplanche and Pontalis, 1973). The system Unconscious is organized by the law of functioning of the primary process, whilst the system Conscious-Pre-conscious functions according to the laws of the secondary process (Freud, 1911). At the time, Freud used the concept of repression (Freud, 1915b) in a general sense. As it is well known, it is only later (Freud, 1926) that Freud was to give a more detailed account of the ego's defence mechanisms, of which repression is one.

Coupled to this "spatial" model of the mind which sought to establish and theorise a distinction between conscious and unconscious mental processes, Freudian theory also provided a dynamic conception of mental or psychical conflict (Freud, 1915a; Wollheim, 1977). Thus, psychical life is characterized by a conflict between repressed unconscious urges or wishes of a sexual nature and with the system Conscious-Pre-conscious. By the process of repression, prohibited wishes are kept at bay in the system Unconscious. This initial model, aimed at explaining neurosis predominantly, diminishes the contrast between normality and abnormality. Dare (1981) considers it to be a complete model of personality. For example, the main difference between an obsessional neurosis or an obsessional personality is seen merely as the degree to which the symptoms are unacceptable, or are believed to be tolerable parts of personality.
However, Freud (1923) found that he required more complexity in his model if all the psychic dynamics that seemed to be taking place in his patients were to be explained. The topographical theory was replaced by the later structural theory (Freud, 1923). He introduced a series of three constructs, some of which stretched across the depth levels of Unconscious, Preconscious and Conscious in the following way:

Figure 3.

(Freud, 1923: 111).

The combined schematization has an Id completely in the unconscious region and the Ego and Superego stretching across all three levels. The concept of the ego defence mechanism was further elaborated by Freud (Freud, 1926) so as to include other defences alongside repression. The model involves the drive-dominated aspects of the mind, the Id, which operates according to the pleasure principle (Hall and Lindzey, 1970). It is seen as entirely amoral and has illogical wishes. Its stimulus is expressed only after being processed by the Ego, the evaluator of external conditions and self-identity. What is considered superficially to be personality is, in fact, the style of behaviour resulting from the Ego defences in contact with the external world. Heed must be taken of the ideals and rules of the Superego, commonly called the conscience, and is often clearly in opposition to the Id. By balancing the demands of the instinctual drives, the rules and regulations of the Superego, and the realities of the outside world, the Ego gives a predictability
and regularity to mental life, and the qualities of its functions are the qualities of the personality (Dare, 1981).

The difference between the Id and the Ego is expressed in terms of what Freud called the primary versus the secondary processes. The Id, which precedes Ego and Superego development, operates according to a primary-mental process, seeking immediate gratification and, if checked, resorts to hallucinatory wish-fulfillment in order to satisfy the Id urges (Rychlak, 1981). It is the Ego's defences that help check these wish-fulfilling tendencies in behaviour.

However, anxiety arises when the Ego is overwhelmed by excessive impulses which it is unable to bring under control. The ego is forced to take extreme measures to relieve the pressure. These measures are then known as the defence mechanisms of the Ego. Ego defences may be seen as a demonstration of the personality's habitual style of coping with anxiety (Hall and Lindzey, 1970). The premorbid personality would thus include the constellation of defences inferred from particular ways of handling stressful situations.

However, Freud's developmental model is also crucial for understanding the basic structure of personality. Indeed, Freud believed that personality was well formed by the end of the fifth year and that subsequent growth consisted of elaboration on this basic structure.

2.3.2 The psychoanalytic view of personality development

Freud's notion of the sexual drive comprises four elements: pressure, source, aim and object. The term pressure has a dynamic connotation
which the notion of drive implies. It is basically a demand for work. The term source refers to a bodily zone which, when stimulated, produces a type of pleasure called sexual. The aim of the drive is to obtain satisfaction. In Freud's view, the term aim also refers to the position taken by the subject vis-a-vis the object in fantasy (Laplanche and Pontalis, 1973). In this sense a variability of aim obtains, for example, when psychoanalysts refer to active and passive; masochistic and sadistic, or phallic and castrated aims of the drive (Freud, 1915c, 1931). The term object refers to persons, to part object and especially to the inner phantasy representation of object (Laplanche and Pontalis, 1973). Freud paid special attention to the variability of the object of the drive in human sexuality. It is this variability which, for Freudian theory, marks an important distinction between human sexuality and animal sexuality, which in the whole tends to be genetically pre-programmed. The concept of drive is different to that of instinct and human sexuality is not ensured in advance. Its development or maldevelopment is mediated through a complex series of psychical structures of which Oedipus Complex is one.

Freud (1905) distinguished between three stages of psychosexual development: the oral, anal-sadistic and phallic-Oedipal stages. Because of the intrinsic link between personality development and the development of the sexual drive, as implied in this concept of drive, Freudian theory contends and offers ample evidence to show that a faulty negotiation of the conflicts inherent to these stages leave a characteristic stamp or mark on the personality (Freud, 1909, 1923, 1926). Round about the second year of life, the anal-sadistic stage takes
prominence. The object relation to the mother becomes invested with meaning, having to do with the function of defaecation (retention/expulsion) and the product of defaecation itself (the symbolic value of the faeces) (Laplanche and Pontalis, 1973). It is also at this stage that the child first experiences the social regulation of his bowels. The conflicts inherent to this stage may lead to exaggerated reaction formation and sublimation such as obstinacy, miserliness, orderliness and the hoarding of possessions (Freud, 1908). A combination of these traits usually forms an intrinsic part of the anal anankastic personality (Freedman, Kaplan and Sadock, 1976).

In the third, phallic-Oedipal stage, the genital erotogenic zone becomes the centre of the child's sexuality (Freud, 1905). This stage culminates in the Oedipus Complex, which is a complex, psychical structure during which important psychosexual distinctions are established between the male and female child (Mitchell, 1976). It thus provides an understanding of the attainment of normal genital-heterosexuality. The conflicts inherent in the Oedipus Complex were hypothesized by Freud to underlie neurotic psychopathology (Freud, 1926).

In the positive form of the Oedipus Complex, the little boy desires his mother and develops hostile impulses towards the father. Under the impact of castration anxiety, the little boy fears the loss of his penis and this anxiety leads to repression of his Oedipal desires and the introjection of, or identification with, his father.

The little girl's Oedipus Complex is more complicated (Freud, 1931) and although it is not within the scope of this thesis to explore this complexity, it is important to point out that there is an ambiguity between the little girl's and the little boy's Oedipus
Complex. The little girl starts initially in a position similar to that of the boy and desires her mother. However, with the realization of castration, she enters her positive Oedipus Complex and transfers the object from mother to father. This transfer occurs under the unconscious aegis of penis envy. The little girl's positive Oedipus Complex is, however, weaker since the realization of castration entails a repression of the little girl's active sexuality (Freud, 1931).

Subsequently, a period of psychosexual latency ensues until the onset of puberty. Some hostility towards the same-sexed parent and desire to possess the opposite-sexed parent still remain, but it is the relative strength of the identification that will determine the degree of "masculinity" or "femininity" developed. With an adequate emotional environment during childhood development, healthy and appropriate use will be made of ego-defences, and there will be no development of neurosis.

2.3.3 Assessment

Pervin (1975) asserts that different theories of personality tend to lead to different techniques of personality assessment. Tests that are non-structured and disguised tend to be associated with clinically-oriented theories that emphasise unconscious factors. The clinical orientation is associated with the variability in response emphasised in non-structured tests, and the emphasis on the unconscious is associated with the need for disguise.

The clinical method of history taking has often been associated with psychoanalysis, yielding a wealth of information in its attempt to plot the growth of personality through various psycho-social stages (Samuel,
(1981) points out that at present it is by no means a technique employed exclusively by psychoanalysis. This aspect will be discussed in depth in Section 2.5.

Projective testing is often used as illustrative of the psychoanalytic approach. The assumption underlying both the specific techniques, and the whole indirect approach to interpreting assessment data, is that when a person can respond relatively freely, his total behaviour betrays many of the determinants that brought it about (Janis et al, 1969). Freedom to respond acknowledges the fact that behaviour is sometimes highly constrained and that at other times, there are more options open. The more freedom is allowed, the less constrained the behaviour of the subject. It is thus possible to tap the tendencies within him that make up his personality. Projective methods differ from direct methods in that they do not depend on the subject's willingness to give information about himself. Freud (1905) described this assessment process as follows, "He that has eyes to see and ears to hear may convince himself that no mortal can keep a secret. If his lips are silent, he chatters with his finger-tips, betrayal oozes out of him at every pore" (1905: 77-78).

The best known projective devices used for personality assessment are the following:

2.3.3.1 The Rorschach Inkblot test: This test is regarded by Dare (1981) as the archetypal projective device to which much of the controversy, generated in relation to projective techniques, applies. The test consists of ten symmetrical inkblots about a vertical axis and the subject is asked to say what he sees in each blot in turn. It allows criteria such as location
determinants, content and originality to be scored. There have been a number of systems used for scoring the Rorschach and it allows the clinician to make inferences about almost any facet of personality such as abilities, motives, defences, pathological trends and values (Janis et al., 1969).

2.3.3.2 The Thematic Apperception Test (TAT): The psycho-analytic rationale for the TAT is the same as that for the Rorschach, except that TAT stimuli are pictures of people in real-life settings rather than totally ambiguous shapes. Thirty-two cards are available to the examiner, although typically only twenty are used. The subject is asked to make up a story appropriate to the picture shown. The TAT is a flexible instrument which can be adapted to individual circumstances and requirements (Dare, 1981). A number of techniques for interpreting the TAT have been devised which attempt to tap attributes of the subject's personality.

The validity of projective techniques is seen by a number of writers as being both complex and equivocal (Pervin, 1975; Dare, 1981; Samuel, 1981). Janis et al. (1969) sees projective tests as having no intrinsic validity as they are not direct measures of specific aspects of personality. However, in using the richness of these techniques, both reliability and validity is called into question. Dare (1981) argues that to ask whether a projective test is valid is meaningless, as the information obtained is about the subject's experience rather than his behaviour. Pervin (1975) concludes that after years of research on projective techniques, a mass of conflicting information has been collected. A number of psychologists
are impressed by the clinical utility of the Rorschach in the assessment of personality but also take seriously the equivocal nature of the research findings. Dana (1965) states that he uses the Rorschach in the face of strong professional admonitions to the contrary, as it is realized that adequate use of the test is dependent upon the clinician. Yet there is continual pressure to demonstrate that the Rorschach meets the usual psychiatric criteria such as objectivity, reliability and validity which is does not seem able to do (Dare, 1981).

2.3.3.3 Projective testing as used in the aged: Most of the studies of projective techniques involving older people have been undertaken between the late 1940's and the 1960's (Lawton et al, 1980). Since then there has been a decline of interest mainly because few studies met the standards of currently acceptable research methodology (Cummings and Henry, 1961; Ames, 1974). Many studies also failed to include cognitive ability in their data-analytic designs. A test like the TAT or GAT (Geriatric Apperception Test) may make excessive demands on an older person and more so someone who has marginal intelligence. Sensory and motor impairment may penalize the older person and in some cases the task may be impossible. Hearing deficits can clearly influence any test performance if directions are not properly understood. Eis dorfer (1960, in Lawton et al, 1980) found that hearing impairment was associated with several Rorschach indicators of low developmental level. The usefulness of a test protocol may also be minimal when the subject rejects many Rorschach cards. Age-related changes in Rorschach scores are sometimes explained in terms of inner tension and the desire to escape. This result may, however, also
be partly attributable to the presence of organic brain syndrome, poor physical health of socio-cultural background (Gunner-Swenson and Jensen, 1976). Thus, although projective tests may be useful as a clinical tool in the study of premorbid personality, their validity becomes questionable when used in the aged.

2.4 The factor analytic approach to the study of personality

2.4.1 Theoretical aspects

H.J. Eysenck is regarded by many as one of the most important pioneers in the modern study of personality. Using the statistical technique of factor analysis extensively, he has built up elaborate theories, his approach being situated within the "objective" approaches to personality (Eysenck, 1947; 1960).

2.4.2 Typological theories

Eysenck's study of personality takes two directions. One direction is concerned with understanding and explanation of personality whilst the other is concerned with description and measurement. The former involves Eysenck's explanation of the biological basis of personality while the latter is concerned with factor analytic studies. Both have been incorporated into the development of the inventory scales where an attempt has been made to measure personality dimensions in a quantitative way against a theoretical background (Eysenck, 1964).

Human typology, the classification of human personality into various types, is a principal interest in Eysenck's work (Eysenck, 1964). Early Greek scholars, like Hippocrates and Galen, isolated four outstanding personality types which they asserted were attributable to the preponderance of the four bodily humours. Kant later echoed the early Greek typologies in his exposition of the four temperaments,
Sanguine, Melancholic, Choleric and Phlegmatic. Choleric and melancholics were thought to have strong affects, while sanguines and phlegmatics were characterized by weaker affects. Wundt (1903, in Eysenck, 1969) found a high rate of change of affect in sanguines and cholerics and a slow rate in melancholics and phlegmatics.

These early typological theories were used in Eysenck's research because of the implied notion that underlying human behaviour there are certain "traits" characteristic of a particular individual. These traits intercorrelate to form broader "types" than Wundt's four uniform variations of the human personality, "to a quantitative two dimensional system in which people can occupy any position and any combination of positions on two major dimensions" (Eysenck, 1969 : 15) which he later called Extraversion and Neuroticism.

2.4.3 Biological aspects of personality

Eysenck (1967) embarked on numerous investigations to discover a biological basis for personality. He assumed that certain aspects of personality were attributable to hereditary factors. With regard to the factor of Neuroticism, Eysenck (1960) argues persuasively, in an extensive review, that Neuroticism is related to the lability of the autonomic nervous system. The factor Extraversion is related to cortical excitation and inhibition in which extraverts have higher excitatory thresholds than introverts, but weaker inhibitory thresholds. This hypothesis is based largely on the work of Pavlov and has not been experimentally demonstrated.

2.4.4 Factor analytic studies

Using Guildford's (1959) factor analytic work, and investigating the inter-
correlations between those factors isolated by Guildford, Eysenck (1967) yielded two important factors, one of emotional instability (Neuroticism) and one incorporating the Extraversion and Introversion group of traits. This lent support to the validity of pursuing the search for a two-dimensional system of personality.

2.4.5 Assessment

2.4.5.1 The Maudsley Personality Inventory (MPI):
This was first published in 1959 and consisted of items adapted from Eysenck's first inventory for Neuroticism, as well as from the Maudsley Medical Questionnaire. Furthermore, it included items from the Guildford Scales: Sociability, Emotional Depression, Cycloid Disposition, Self Restraint, General Activity and Asundance (social initiative). By means of factor analyses, items which bore no relation to the major dimensions were omitted. Items showing significant relation to the dimensions which differentiated the sexes were also excluded (Bursill, 1960). The final questionnaire consisted of 24 items for the neuroticism scale, and 24 for the extraversion-introversion scale.

2.4.5.2 The Eysenck Personality Inventory (EPI):
This was originally supposed to have been constructed as a revision of the MPI but is now regarded as a new questionnaire. The test is more applicable to populations of low intelligence or educational level. It includes a lie scale, a construction of two parallel forms and a reduction in the small correlation between Neuroticism (N) and Extraversion (E) found in the original
2.4.5.3 The EPI as used in the aged: Lawton et al (1980) regard the MPI as more appropriate for use in the elderly than projective tests, as both the Extraversion and Neuroticism scales have been found to be highly stable and applicable over many diverse samples.

Cameron (1967) used the Extraversion scale of the EPI and a number of other measures to test for age differences. On the EPI, the results indicated that aged females were more introverted than young adult females but no evidence of a difference between aged males and young males along these dimensions were found. Cameron attributed these results to the importance of female physical attractiveness in American culture and physical deterioration with age. He noted, however, that the control group of younger females resided in co-operative apartments and that Extraversion may be a characteristic of females who join such ventures.

2.4.5.4 The EPI as used in depression to test premorbid personality: Kendell and DiScipio (1968) used the EPI in a study of 92 depressed subjects in an attempt to test their premorbid personalities. They contended that a fundamental requirement of any personality test was that it should be relatively independent of the patient's mental state and reflect his personality rather than his illness. In depressive illness, it is doubtful whether this requirement is met. For example, Coppen and Metcalfe (1965) administered the MPI to 39 patients with severe depression while they were depressed and again after recovery. Both the decrease in mean Neuroticism (N) score and the increase in mean

MPI scales (Eysenck and Eysenck, 1964).
Extraversion (E) score on recovery were statistically significant. The customary definition of personality as the relatively stable and enduring aspects of an individual's behaviour precludes such gross changes from being interpreted as changes in personality. The obvious explanation is that patients do not rate their usual way of acting or feeling but remain preoccupied with their current state of mind.

Kendell and DiScipio planned their study to see if patients could be persuaded to describe their normal personalities in spite of depression. The EPI was first administered with the standard instructions (T1). Later the same day the patient was given the test with the additional instruction to disregard any illness he had and answer according to how he behaved and felt when he was his normal self (T2). The test was given a third time (T3) when the patient was adjudged to have recovered, either before or after discharge. For T1, either of the two parallel forms A and B was given at random. For T2 the same form was given again. For T3, however, the patient was given the other form but still with the extra exhortation added to the instructions.

There was a significant difference between the results obtained on both scales for T1 and T2, showing clearly that unless the standard instructions are amended, depressed patients obtained misleading scores on the EPI, both spuriously high N and spuriously low E scores. The difference between the scores obtained when ill (T2) and those obtained after recovery (T3), were not significant and it may reasonably be assumed that these were a fairly accurate assessment of the patients' normal selves. It was shown fairly clearly that if the extra exhortation was added to the test instructions,
patients succeeded to a remarkable extent in describing their normal selves, even when they were quite severely depressed.

Furthermore, they found that neurotic depressive patients had a higher N score and lower E score than both psychotic depressives and normal patients. Psychotically depressed patients had a higher N score and no difference in E compared to normals, and higher E and lower N than neurotic patients. These findings must be tentative since the sample was confined to hospital patients, and these may have been an atypical minority of depressed patients (Epstein, 1976).

Although there seems to be a paucity of information, available evidence seems to indicate that EPI scores with the Kendell and DiScipio modification, provide an accurate picture of premorbid personality, uncontaminated by the depressed mood.

2.5 Life history approaches

Kenneth Keniston (1963) used an autobiography of Inburn, a college sophomore, to identify the major themes of his life. He interpreted Inburn's Oedipal desires for his mother as a basis for later alienation in which he turned his anger against established society. Keniston (1963) summarizes his approach to the analysis of life saying, "... only when we have begun to understand the subtle interweaving of themes, the over-determination of any single act, belief or fantasy and the multiple functions that every dream, wish, behaviour and philosophy serves, do we begin to understand something of an individual" (Keniston, 1963: 60).

Sundberg (1977) outlined three major approaches to life history.
The first is a search for themes that run through the account and help to explain many events. The second is the search for aetiology, in which the assessor looks at a case history for sources of stress, impaired relations and perhaps physiological conditions. He then tries to determine the antecedent of a present disorder. A third approach is to search for predictors. This means that the assessor analyses the material to locate specific events or characteristics that correlate with later events. Studies of this nature may lead to comprehensive insights into the way personality functions, providing greater depth than fixed measures. The person's unique style and pattern of coping with life stresses can be assessed.

Usually this kind of history is retrospective and the assessor may also have to investigate the person's historical and cultural context. This provides an understanding of habitual patterns of behaviour, which then sheds light on the current problematic coping-style. There have been a number of attempts to systematize this approach.

Buhler and Massarik (1968) used the life history approach to assess changes in certain qualities in people as they grew older. They conducted several studies of creativity and productivity in the life spans of eminent people. Two factors related to the highest periods of productivity were isolated. Activities requiring "vitality" reached the highest point in the twenties and early thirties. Those requiring "mentality" reached their highest point later in life.

Using retrospective studies, Waterman, Geary and Waterman (1974) have attempted to test Erikson's (1956) theory of developmental crises. They found that although many college seniors had significantly consolidated their occupational and ideological identities, a substantial
proportion were still leaving college in a state of identity diffusion.

An attempt to measure maturity of persons, using the life history approach, has been made by Loevinger (1966). Drawing on a wide theoretical base, she views the self as an integrator of experience, as the individual meets the successive problems of life. Using sentence completion tests, she has developed a method of scoring these completions which indicates the degree to which the person has reached a developmental level.

An interesting amendment to life history procedure was developed by Gillmore (1976, in Sundberg, 1977) called the "photohistory". This consists of 15-50 photographs dating from birth to the present. The subject is required to order the photographs chronologically. This provides a stimulus for generating pertinent questions, plunging the subject back into the thoughts, feelings and happenings associated with the photograph. Gillmore claims that this results in an integrated and accurate experience of development.

Apart from these aids to life history, there have also been attempts to systematize life history itself. Sundberg (1977) refers to a systematic life history schedule called the "biographical information blank" or biographical inventory. The test developer gathers a set of life history items, presumably related to a criterion such as job performance, or to a theoretical construct such as achievement motivation. The items thus cover relevant facts, past experiences and activities. In various studies, large pools of items have been developed which correlate with criteria such as leadership.

Life history items have been used more often in industrial than in clinical psychology. Yet the importance of life history is continually
being emphasized. Phillips and Draguns (1971) have investigated the premorbid personality in schizophrenia, using a life history approach. Patients thought to have a better prognosis for recovery were those showing early signs of "turning against the self" rather than social withdrawal and "turning against others".

Briggs et al (1972) have developed the Minnesota-Briggs History Record as a specific biographical inventory. This has since been converted into a self administered inventory, consisting of items which, amongst others, tapped important events regarding the subject's relationships with significant others. This history record has been used to demonstrate differences between juvenile delinquents and non-delinquents. Using factor analysis, the following scales were developed: family disunity, conflict with parents, health awareness, introversion, school and job failure, breakdown and addictions, and social maladjustment.

Sundberg (1977) states that the person's life history is the person and that the best predictor of the future is the person's past behaviour in similar situations.

2.5.1 Findings of life history in depression

Using a case history approach, Roy (1981) investigated the role of past loss in depression. In a matched, controlled study of 102 depressives, he found that a large proportion had experienced parental loss before the age of 17 years.

Lloyd (1980a) reviewed studies examining the hypothesis that life events which occur during childhood or early adolescence may predispose
a person to depression in adulthood. She found that depressives had a higher incidence of childhood bereavement and other childhood loss events than matched controls. It appeared that childhood loss of a parent by death generally increases the depressive risk by a factor of about 2 or 3. She further concluded that early loss events were also related to the severity of subsequent depression and to attempted suicide. However, she found that most depressives had not experienced an early loss event, clearly indicating that other causal factors are operative.

In another review, Lloyd (1980b) examined the hypothesis that major life events may precipitate a depressive disorder. The majority of studies, she found, demonstrate that depressive patients experience more stressful events in the months that precede the onset of their disorder, than do normal controls. She calculated the risk factor to be about 5 or 6, at six months after the event. The criticism here is that the conclusions emanate from retrospective studies. Lloyd (1980b) suggests that corroborating prospective studies are needed.

2.6 Personality development in old age.

Ideally, the senium should be an opportunity for the final maturation of the personality. However, when a representative sample of graduate students was asked to describe old people, the adjectives "stubborn", "toughy", "bossy", or "apt to complain excessively" were used by a high percentage (McTavish, 1971). Simone de Beauvoir (1972) believes that boredom, indolence, resignation and lack of trust are traits characterising old people. Thomae (1980) sees the origins of these stereotypes of the aged personality as outcomes of over-generalized observations.
on very specific, unrepresentative samples. De Beauvoir, for example, quotes outstanding French poets, politicians, and scientists regarding their reactions to loss of roles in old age. Overgeneralization also results from problem cases seen by psychiatrists. Their observations of these states of deterioration and irritation may contribute to the stereotypes of older people.

Thompson (1973) contends that many commonsense notions about age changes do not show up in the laboratory, while many laboratory phenomena, observed under highly controlled conditions, tend to become obscure in the real life situation where multiple interactive variables operate. Many phenomena are also often presented without cautionary notes concerning their generalizability. Until very recently, many psychological studies were based on institutionalized subjects, who constitute a small minority of the aged population.

Most research data is derived from the trait-centred approach which defines the aged by the similarity or difference of trait-scores measured in persons of different age groups at the same measurement point, or in the same person at different measurement points (Thomae, 1980). A number of authors draw attention to the limitations of this approach as it is based entirely on expected correlations between age and trait-scores and the interactions of other variables cannot be taken into account. This process-centred approach involves the analysis of naturally-occurring behaviour observed in the interactions among people in real settings. However, data in this regard have not yet been applied to a study in ageing and personality (Thomae, 1980).

2.6.1 Trait approaches to the ageing personality

Guildford (1959) describes personality as a unique pattern of traits.
He measured adult and adolescent populations and compared them with the elderly and found that there is no universal trend towards changed personality traits in the transition from middle to old age. Findings related to the trait approach include the following:

2.6.1.1 Activity A decrease in activity or vitality is expected with increasing age. Palmore (1970) found a non-significant decrease between the first and the twelfth measurement points of the Activity inventory scores of the Duke study subjects. The important conclusion to be drawn is that there is consistency of activity from middle to old age. Thus, activity theory of ageing, mentioned earlier (Section 1.2) as a valid alternative to the disengagement theory, is supported (Cumming and Henry, 1961). Another study (Neugarten, 1977), showed that life satisfaction is positively related to social action or activity. Life satisfaction will be attained if the elderly person can remain active in everyday life.

2.6.1.2 Mood and happiness Because of the increased frequency of depression in elderly persons, some psychiatrists have tended to generalize this into a depressive syndrome basic to the ageing personality. However, Thomae (1980) refers rather to a "neutralization" of mood with age. He sees this as being related to perceived health, attitude towards others, degree of social participation, degree of perceived frustration and failure in life.

2.6.1.3 Life satisfaction and morale Life satis-
faction is regarded as an index of successful ageing (Havighurst, 1963) and is defined as the ability of the individual to recover from disturbances in affective emotional state.

Morale, defined as psychological well-being based on sense of purpose and confidence in the future, is regarded as another trait which changes in normal ageing (Thomae, 1980). Cameron (1967) found morale to be lower in older subjects as compared to younger subjects. However, it should be emphasised that life-satisfaction and morale are the outcomes of, rather than the conditions for, adjustment processes.

2.6.1.4 Locus of control This concept was introduced by Rotter (1966) within the framework of a cognitive social learning theory of personality. "Internal locus of control" refers to a consistent, generalized expectation of the person that he or she controls events, whereas "external control" occurs when the person believes that he or she is completely dependent on the decisions, plans or actions of others. Expectations for internal control may be higher in the years before old age and changes perceived from middle to old age may reduce this sense of control.

Trait-centred approaches to the aged personality face the common problem of generalizing observations and/or experimental findings, from a sample to the population of the aged. However, the conflict between the generalizing orientation of the developmental psychologist and the individualizing orientation of the personality psychologist may be partially resolved. Interindividual differences in development have become a major issue in theory and research.
in old age (Rotter, 1966).

2.7 Rationale and general aims of the study

The review has thus far focussed on the concept of depression in old age within the framework of various theories of ageing, involving biological, psychological and sociological aspects. General physical and psychiatric conditions often experienced in old age have been outlined and these have been seen to be relevant to the incidence and presentation of depression in old age.

The author has also summarized arguments for conceptualizing depression as either a single entity or as a number of separate disorders. For the purposes of this study, depression will be regarded as a continuum within a unitarian model, as it is seen by Kendell (1968) and Hill (1968).

Both within the section on aetiology, as well as that on treatment of depression, personality factors are seen as crucial. In Zung's (1980) triadic model of treatment, the premorbid personality was seen as one of the three pillars affecting treatment outcome.

The concepts of personality within various theoretical frameworks were seen to differ markedly. Both the psychoanalytic and the factor analytic approaches to personality study appear to be valuable and a synthesis or temporary "marriage of convenience" between these approaches could yield a wealth of information. This could have clinical relevance regarding prognosis in old age depression, since decisions about therapeutic intervention would be enhanced by knowledge of the premorbid personality.

However, despite the importance of personality studies in the elderly, there appears to have been a decline of interest since the 1960's. Studies that have been attempted have often been methodologically unsound.
or have been attempts to either question or support various personality stereotypes. This has often resulted in what may be seen as futile exercises (McTavish, 1971).

Previous research has also failed to investigate the development and functioning of the elderly personality and relate these to the present situation or problem. There have been some mitigating factors. The primary one is that it is simply more difficult to test older people. They often work very slowly or additional time is needed to convince them of the necessity of responding to the test. Very often questionnaires demand that the subject be able to read or indicate responses on a recording form. In the case of the Thematic Apperception Test (TAT), extensive directions for taking the test and the requirement to produce a logical story may make excessive demands on an older person. Sensory deficits, educational deprivations, social subgroup differences and cohort-specific cultural norms may also be the sources of response and interpretation problems. Certainly the healthier, more economically secure and more culturally privileged the older subject, the less likely are such problems to occur (Blazer, 1982).

A further difference is that the information is almost always retrospective in nature. Such studies may be coloured by the present mental state which lays the validity of the data open to question. Thus Lawton et al. (1981), in reviewing personality testing in old age conclude, "... that the current state of the art is not encouraging ... however, where coherent theory, judicious test choice and careful methodology have been applied, knowledge has been advanced" (1981, : 549).

Many previous studies of depression in the aged have made use of institutionalized patients (Trichard et al., 1980; Post, 1972). One
of the most important methodological flaws in these studies is seen by Blazer (1982) as the over- or under-estimation of the phenomenon. For example, many individuals may not seek consultations for their depressions in late life. Zemore and Eames (1979) cite the failure to provide adequate control groups. The decision to enter the institution and institutionalization itself may be a confounding variable. Kendell and DiScipio (1968) state that it is widely accepted that only an atypical minority of all aged depressives are ever admitted to hospital.

The aim of the present study is to investigate in-depth the development and functioning of the personalities of depressed elderly persons as compared to the development and functioning of non-depressed elderly persons. Its uniqueness lies in the fact that previous studies of aspects of personality development (Lloyd, 1980; Roy, 1980) of depressives have involved mainly younger adults. A study which does include older people is that by Gillis and Zabow (1981) which examined the life histories of those who were diagnosed as dysphoric. This study was, however, limited to institutionalized patients.

The present study uses both the life-history as well as the factor analytic approach. The former provides a structured retrospective view of personality development, which taps the subject's usual personality functioning as well as reconstructing important phases of his life. One may thereby investigate what has happened to him, what crises he has undergone and how he has coped with these crises. Clues may be provided as to his present condition, in a similar way to that which Phillips and Draguns (1971) have used in their study on schizophrenics. As Sundberg (1977) observes, "... the task of the assessor
is to understand the person of this minute’s observation and the relation of these observations to the days and years of the person’s developing life. Each individual may be viewed as a long story of which we are reading one page” (1977 : 84).

However, retrospective accounts are often coloured by the subject’s mental state. Therefore, they may not reflect an accurate premorbid personality. Thus it is intended to make use of a factor analytic approach with a modification to ensure the functioning prior to the episode of depression is indeed described by the subject. This will ensure that the data is uncontaminated by the present symptoms (Kendell and DiScipio, 1968).

Particularly in the light of the paucity of comprehensive personality studies and reliance on institutional samples, this study is valuable because of its use of subjects in the community. Blazer (1982) regards community surveys as the only direct means of estimating prevalence and incidence, provided that it is possible to accurately identify cases. With regard to the study of premorbid personality, Kendell and DiScipio (1968) point out that, "Firm conclusions about the personalities of those who develop depressive illnesses can, however, only be made on the basis of community studies” (Kendell and DiScipio, 1968 : 770).

The present study, by investigating an important aspect of depression in old age, may assist in planning psychotherapeutic intervention where such is indicated. Even more important though, it is hoped that the study will allow for planning towards the prevention of depression in old age.
3. Methodology

3.1 Research design

This study was designed to compare the difference in premorbid personality between elderly depressed and elderly non-depressed persons. Elderly was regarded as any person 65 years and older. Using a randomly selected sample of elderly "Coloured" persons in one geographical zone of the Municipal Comprehensive Health Service ("community sample"), two groups of subjects were selected on the following basis:

i) the depressed group, consisting of moderately and severely depressed subjects, who were defined as those scoring twenty points or above on the Hamilton Depression Rating Scale;

ii) the non-depressed group, consisting of subjects scoring less than 10 points on the Hamilton Depression Rating Scale.

All moderately and severely depressed in the community sample were matched with non-depressed subjects on the following variables:

i) Age

This variable was matched because it has been suggested that there is a change in the prevalence of depression in old age. Blazer (1982) postulated that the milder forms decrease and the more severe forms of depression increase with increasing age.

ii) Sex

It is suggested that there is a sex difference both in the
prevalence and incidence of depression. Murphy (1982), in a review concerning the origins of depression, found that working class women were five times more likely than working class men to develop a depressive disorder in the year following a severe difficulty.

iii) Marital status

Elkowitz and Virginia (1980), in a review of the relationship of depression to widowhood, found that the majority of depressed elderly persons are either divorced or widowed.

iv) Socioeconomic class, social support, type of accommodation, previous and present employment and living arrangements.

These factors have been found by a number of researchers to be associated with depression (Butler, 1974; Zung, 1980; Bergman, 1982). In a comparison between elderly depressed subjects and normal elderly people, Murphy (1982) found an association between major social difficulties and depression.

v) Physical morbidity

Section 1.6.2 outlines the importance of the relationship between physical factors and depression.

vi) Number of life events

Stressful life events may contribute to the aetiology of depression as a precipitating event (Briscoe and Smith, 1975) and it has been found that there is an increased frequency of these events amongst depressed subjects. Object loss has received most attention as a predisposing event for depression (Lloyd, 1980).
As it was expected that subjects from both groups would be able
to provide comprehensive answers to questions related to life history,
it was a criterion that all the subjects were considered to be
cognitively intact. Thus the subjects were screened for cognitive
impairment by two psychiatrists who carried out a psychiatric
mental state examination independently.
Experimenter effect was reduced by applying a "blind" measure in which the researcher was not informed as to which of the subjects were depressed or non-depressed, until completion of the experiment.

The independent variables were thus depression and non-depression, and the research design was:

<table>
<thead>
<tr>
<th>Depressed</th>
<th>Non-depressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 10</td>
<td>N = 10</td>
</tr>
</tbody>
</table>

The dependent variables were two measures which tapped premorbid personality, (i) the two scales of the Eysenck Personality Inventory; Extraversion and Neuroticism, and (ii) seven scales of the Psychosocial Index: current adjustment, condition at birth, development and functioning; significant relationships, stress, current family functioning and the psychosocial index percentage. Comparisons were carried out separately for each of the dependent variables.

The statistical measure used was Hotelling's $T^2$ test which reduces the probability of Type I error likely to occur in individual t-tests (Gilbert, 1978).

3.2 Subjects

There were six females and four males in each group. The experimental group consisted of the moderately and severely depressed subjects in the community sample. The control group consisted of ten non-depressed subjects matched on the measures previously mentioned.

The means and standard deviations for age and Hamilton Depression Rating.
Scores for both of the groups are given in Table IIb. Appendix E contains the scores /ratings of matching variables for each subject in the two groups.

Table IIb

<table>
<thead>
<tr>
<th>S U B J E C T S</th>
<th>AGE</th>
<th>HDRS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MEAN</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Depressed Group</td>
<td>71:1</td>
<td>3.31</td>
</tr>
<tr>
<td>Non-depressed Group</td>
<td>70:8</td>
<td>3.48</td>
</tr>
</tbody>
</table>

3.3 Apparatus

The description of apparatus is divided into three sections, according to the scales used at various stages of the study.

3.3.1 Selection of depressed and non-depressed groups

The Hamilton Depression Rating Scale (HDRS)

The HDRS (Hamilton, 1960) is widely used and Mowbray (1972) regards it as an invaluable instrument for clinical research in psychiatry. Citing a number of factor analytic studies, he argues that this scale provides a way of objectively recording observations made at clinical interviews with depressed patients. He adds that, used by practiced and experienced interviewers, a satisfactory level of inter-observer agreement can be achieved.

In a comparative study (Bailey and Coppen, 1976), correlations
were made between the Hamilton Scale and another widely-used scale, the Beck inventory (Beck et al., 1961). Although divergent results were found in one-third of the subjects, significant and satisfactory correlations were found in two-thirds. The researchers state that trained clinicians can reach a high degree of reliability using this scale. In a validity study of the HDRS (Knesevich et al., 1977), a high correlation (0.89) was found between the HDRS and a psychiatrist's global rating, and between the change in these during treatment (0.68).

Nowbray (1972) used the following total scores as a guide for assessing the severity of depression:

- Above 35 - Very severe expression
- 25 - 34 - severe depression
- 20 - 24 - moderate depression
- 15 - 19 - mild depression

The Hamilton Scale has been used in the Cape Peninsula studies with satisfactory results (Gillis and Elk, 1981; Gillis et al., 1981). Its items correlate highly with symptoms of depression in old age tabulated by Zung (1980) and cited in Section 1.5.3.

3.3.2 Measures used for matching

All subjects in the community sample were rated on the following measures:

1) Age, sex, marital status, previous occupation, occupation at present, living arrangement, type of accommodation, support network and assessment of physical morbidity (see Appendix B for operational definitions).
ii) Life events schedule (Dohrenwend, Krasnoff, Askenasy and Dohrenwend, 1978).

This schedule is composed of 10 items which together provide a reasonably comprehensive review of the changes occurring in the subject's life-world during the six months preceding the interviews. It is composed of eleven sections tapping the following areas: work, residence, finance, school and training, health, contact with the law, love and marriage, children, family, rituals/customs and other. All changes in these areas, as well as their impact on the subject's life, are noted.

Although validity and reliability figures are not available for this schedule, it is presently being used by the Medical Research Council (MRC) in a large scale study of psychiatric patients admitted to Valkenberg Hospital, Cape Town.

3.3.3 Measures administered only to the experimental and control groups

(a) The Eysenck Personality Inventory.

This instrument has been described under Section 2.4.5.2 and is probably one of the best known personality inventories. Lanyon (in Buros, 1972) states that, "... as a measure of the two major factors of personality, the EPI scales are as good as any" (1972 : 76).

Standardization

The MPI was developed with a standardization sample of 400 subjects (200 men and 200 women), all between 20 and 36 years of age. About
50% had university educations. EPI constructions had previously involved the participation of 30,000 subjects. Numerous other standardizations have been conducted in other parts of the world making the EPI more widely applicable to other cultures in compensation for the limitations in the original standardization sample (Kline, 1981; van der Spuy and Shamley, 1978).

Reliability

Test-retest reliability and split-half reliability have both been used. For the EPI, test-retest reliability ranged from 0.84 - 0.94 for the complete test and 0.80 - 0.97 for the alternate forms. Split-half reliability was 0.74 - 0.91 (Eysenck and Eysenck, 1964).

Validity

Extraversion is characterized by sociability, friendliness, enjoyment of excitement, talkativeness, impulsiveness, cheerfulness and spontaneity. Neuroticism is characterized by worrying, moodiness, tension and nervousness as well as physical symptoms of anxiety (Kline, 1981). The criteria being employed thus seem to be defined adequately. Descriptive validity has been established by means of nominated groups, which involve acquaintances' subjective ratings of observable characteristics which then yielded satisfactory correlations with Extraversion and Neuroticism scores (Eysenck, 1963). White et al (1968) conducted three investigations into the validity of the EPI. In the first, the mutual Extraversion ratings of five groups of students were compared with their Extraversion scores on the EPI. The correlations were found to be significant. In the second study, two groups of male students scoring at extreme
ends of the Extraversion scale were interviewed about their everyday activities. Most of the differences between the groups lay in the direction predicted. Finally, two extreme scoring groups of female students were compared by means of questionnaires measuring rule-breaking. Extraverts reported having broken more rules more frequently than introverts and expressed more permissive attitudes towards rule-breaking.

The two personality dimensions measured by this instrument are regarded by Hein (in Buros, 1972) to be useful in psychological research. However, he cautions that the adequacy of this instrument for purposes other than research has yet to be verified.

(b) The Psychosocial Index (PSI)

This instrument was developed in South Africa in 1972 (Stricklin, 1974). It provides a framework or model for the assessment of the client's personality development and functioning within a therapeutic setting. It is a systematic method of evaluating case history data. Theoretically, it derives from a dynamic orientation although it is open to use and interpretation by other schools. It attempts to identify the most significant influences upon personality development and functioning and then proceeds to ascertain how, and to what degree, these influences operate in regard to a particular personality at a given time. Identifiable influences are then translated into true/false questions which are grouped according to psychodynamic meaning. Quantitative indicators are yielded of the following:
(a) Severity of maladjustment of the personality.

(b) Assistance, external to the client, aiding in improved functioning.

(c) Prognostication regarding the client's improved functioning.

It therefore has two distinct advantages over other types of evaluation. Firstly, it synthesises all case history data and other information, complementing the psychosocial history. Secondly, it analyses the client holistically within his environmental experience. It includes interaction with significant persons, and the resources, external to the client, available to assist him at a given time.

The PSI therefore, consists of four parts:

(a) a case history and summary.

(b) a questionnaire consisting of 252 true/false statements which discriminate between "normal" and "abnormal" personality development and functioning. This is based on the history and is scored by the same person who took the history. This series of questions will yield scores on the following subscales (Appendix D contains a rationale for and a full description of each subscale):

i) Current adjustment.

ii) Condition at birth.

iii) Development and functioning. There are five divisions in this category: physical, behavioural, intellectual, emotional and social.
iv) Stress. Stricklin (1974) distinguishes between internal stress which is influenced by maturation, and external stress involving traumatic experiences and environmental stresses.

v) Significant relationships. There are three divisions in this category: mother/client, father/client and others/client which include siblings and any other significant others.

vi) Current family functioning.

vii) Community resources. This subscale will not be relevant to the present study.

viii) The PSI percentage. This is a summation of the scales expressed as a percentage.

(c) A graphical representation of results.

(d) A dynamic diagnostic statement.

Reliability

The only data on reliability is that provided by Stricklin (1974) obtained during the development of the instrument. Using the seven major categories of the PSI, 20 case histories of clients referred to agencies for specific problems were rated by 21 examiners, all members of the clinical team. A total of 211 assessments were made. If perfect reliability was to be found, all the cases would have been rated as requiring intervention. To find such a result in a flexible diagnostic tool such as the PSI would not be expected and thirteen aberrations from expectations were found.
Validity

Using a control group consisting of 35 persons regarded as normal and an experimental group of 35 maladjusted individuals, examiners were required to rate and distinguish the two groups. They were able to do this with minimal overlap.

Evaluation

The PSI is one of the few instruments of its kind which has been developed within the South African context. Ramphol (1972) used the PSI to study the effects of the mother-child relationship on the socialization process of individuals, both children and adults. Gillis and Zabow (1981), using the PSI, in a study of dysphoria found that dysphorics have life-long manifestations of undue dependence and inadequacy in both personal relationships and coping behaviour.

3.4 Procedure

A community study of "coloured" aged was initiated by a psychiatric research team attached to the local mental health service. This was similar to, but more extensive than, a "white" study undertaken in 1978 (Gillis and Elk, 1981). The purpose was to provide indepth information regarding the physical, psychological and sociological problems in old age. This information would facilitate planning long-term geriatric health care for this "population group". One hundred and fifty subjects over the age of 65 years were to be selected. Two methods existed for choosing this random community sample:

1) Using the State Old Age Pension List. This was not feasible
because of the enormity of the task which required perusing tens of thousands of pages. Furthermore, the list would only have included persons who actually receive a social pension and would not have been representative.

ii) Using a sample from the list of aged persons compiled by the Cape Town Municipal Comprehensive Health Service. The Municipality has demarcated three health zones. Each zone is divided into districts, a sister being in charge of each district. It is the sister’s duty to keep record of all the elderly residents in the area (women over the age of 60 years and men over the age of 65 years, i.e. pensionable age). These district lists are constantly updated with regard to deaths and change of domicile.

A sample from the Eastern zone was chosen. This zone consists of 35 districts, including most of the Cape Flats townships and home ownership schemes.

3.4.1 Validation of lists

In order to be able to use the Health Service lists, it was necessary first to validate them. For this purpose all 35 lists were collected and, using a table of random numbers, 10 of these lists were chosen. Again using the tables, one street per list was chosen (10 streets). Two of the planners went to these 10 streets. The first 20 houses on each street were visited in order to determine if any women over the age of 60 years and men over the age of 65 years were living there. A list of all aged was compiled. This list was compared to the Health Service lists. The lists were found to be 76% accurate which were
adjudged to be statistically sufficiently high to validate the Health Service lists.

3.4.2 Choosing the community sample

Ten Health Service lists were chosen at random. A proportional sample was chosen based on the number of people listed until a total of 150 was reached.

A group of specially trained interviewers was used. This group consisted of 3 psychologists and 3 psychiatric social workers, the experimenter being one of the interviewers. The interviewers underwent a 5-day course during which the interview format was discussed and practiced in detail. Each interviewer was given an opportunity to conduct a full interview.

The interviewers were supplied with a list of names and addresses. Only those found to be above 65 years of age were to be interviewed. Questionnaires included the following:

- General biographical, medical, psychiatric and social information (Appendix B).
- Hamilton Rating Scale for depression (Appendix C)
- Life Events Schedule (Appendix B)

3.4.3 Choosing the experimental and control groups

Using the Hamilton Rating Scale scores, a sample of all subjects found to be moderately or severely depressed (a score of ≥ 20 points) was chosen. The reason for using a comparatively high cut-off point
was two-fold:

(i) To decrease the risk of including depressive subjects whose Hamilton rating score may have been inflated by somatic complaints.

(ii) Inclusion of mild depressives would have trebled the sample size and matching with non-depressives would have been made problematic.

Eleven subjects were thus chosen and screened for cognitive functioning. One subject had to be excluded because of cognitive impairment. Ten other subjects were matched as closely as possible to the depressed sample on the variables mentioned in section 3.1.

The list of research numbers was handed to the research assistant attached to the team. A list of twenty names and addresses was given to the experimenter, in no way indicating which of the subjects were depressed and which were not. This was done to decrease the experimenter effect. As the researcher had had clinical experience, it was likely that depression, if present, could be detected. However, within the constraints of the study, this appeared to be the most satisfactory arrangement.

The researcher then visited all the subjects, introducing himself as someone who was interested in talking about the subject's early years ("die ou dæe"). This seemed to appeal to all the subjects who, without exception, agreed to be interviewed. Each interview lasted approximately two to three hours, although this period varied considerably depending upon factors such as fatigue, garrulousness and co-operation. Often it appeared as if the subjects were glad to have company for a few hours. The EPI (with the Kendell and DiScipio addition) was
administered first. Then a full psychosocial history was taken.

Many of the subjects made reference to the fact that the interviewer was of the same "population group" as they were and they felt relaxed in his presence. Most of the interviews were conducted in the "dialect" spoken by the local blacks, a mixture of English and Afrikaans. It was thus possible for the researcher to appreciate the nuances of the case history material.

One example of the importance of language used was the answer to one of the researcher's questions involving early experiences of being "down in the dums" to which the respondent replied, "Yes, often". On closer questioning it transpired that the respondent was referring to "dums" the colloquialism for draughts, which had always been his favourite game. Two of the subjects were from the same village as the researcher. This allowed for closer follow-up of socio-economic and family backgrounds.

Carter (1974) argues that determining the presence of psychiatric disorders among blacks can be impossible for those who are not aware of black behaviour patterns. Although he might have been overstating the case somewhat, in this study there appeared to be an element of truth in his assertion.
4. RESULTS

4.1 Hypotheses

Relating to premorbid personality

$H_0$: There is no difference between elderly depressed persons and elderly non-depressed persons with regard to their premorbid personalities as measured by:

(a) the Extraversion scale of the EPI.
(b) the Neuroticism scale of the EPI.

$H_1$: Extraversion scores are significantly lower for elderly depressed persons than elderly non-depressed persons.
Neuroticism scores are significantly higher for elderly depressed persons than elderly non-depressed persons.

Relating to personality development and functioning

$H_0$: There is no difference in personality development and functioning between elderly depressed persons and elderly non-depressed persons as measured by:

(a) the Current Adjustment scale of the PSI.
(b) the Condition at Birth scale of the PSI.
(c) the Development and Functioning scale of the PSI.
(d) the Stress scale of the PSI.
(e) the Significant Relationships scale of the PSI.
(f) the Current Family Functioning scale of the PSI.
(g) the Percentage Score of the PSI.

$H_1$: Scores of elderly depressed persons are significantly lower than elderly non-depressed persons on all of the above scales of the PSI.
4.2 Mode of statistical analysis

The data was analysed by way of an Hotellings $T^2$ analysis (Gilbert, 1978), which permitted simultaneous comparison of the two groups on all nine variables. By taking the correlations between the variables into account in the computations of $T^2$, the chance of concluding that a difference exists when it does not (Type I error) is greatly reduced. If $T^2$ is found to be significant, individual $t^2$ scores for each of the variables are then investigated for significance.

The dependent variables entered into the Hotellings $T^2$ were the following:

i) Extraversion
ii) Neuroticism
iii) Current Adjustment
iv) Condition at birth
v) Development and functioning
vi) Stress
vii) Significant relationships
viii) Current Family Functioning.
ix) P.S.I. percentage score.

All raw data for these computations are provided in Appendix F.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Depressed</th>
<th>Non-depressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>3,8</td>
<td>7,7</td>
</tr>
<tr>
<td></td>
<td>(1,87)</td>
<td>(2,36)</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>10,1</td>
<td>7,7</td>
</tr>
<tr>
<td></td>
<td>(2,47)</td>
<td>(1,83)</td>
</tr>
<tr>
<td>Current adjustment</td>
<td>1,4</td>
<td>1,65</td>
</tr>
<tr>
<td></td>
<td>(0,2)</td>
<td>(0,25)</td>
</tr>
<tr>
<td>Condition at birth</td>
<td>2,93</td>
<td>2,93</td>
</tr>
<tr>
<td></td>
<td>(0,14)</td>
<td>(0,21)</td>
</tr>
<tr>
<td>Development and functioning</td>
<td>2,15</td>
<td>2,43</td>
</tr>
<tr>
<td></td>
<td>(0,22)</td>
<td>(0,23)</td>
</tr>
<tr>
<td>Stress</td>
<td>1,79</td>
<td>2,59</td>
</tr>
<tr>
<td></td>
<td>(0,45)</td>
<td>(0,16)</td>
</tr>
<tr>
<td>Significant relationships</td>
<td>1,47</td>
<td>2,34</td>
</tr>
<tr>
<td></td>
<td>(0,46)</td>
<td>(0,23)</td>
</tr>
<tr>
<td>Current family functioning</td>
<td>1,36</td>
<td>2,42</td>
</tr>
<tr>
<td></td>
<td>(0,24)</td>
<td>(0,25)</td>
</tr>
<tr>
<td>PSI Percentage Score</td>
<td>66,3</td>
<td>85,7</td>
</tr>
<tr>
<td></td>
<td>(3,83)</td>
<td>(2,4)</td>
</tr>
</tbody>
</table>

$T^2 = 588.8$ significant at 0.05 level

$(T^2 \text{ crit } = 48.99) \quad df = 18 \quad (n_1 + n_2 - 2)$
This result indicates that there is an overall significant difference between the scores of depressed and non-depressed subjects on the nine dependent variables investigated.

The results are further investigated as to which of the nine variables accounted for this difference. The vector of t-scores is obtained by dividing the vector of mean differences by the vector of standard errors. The t-scores for each variable are squared and compared to the critical $T^2$ used in the overall test, to maintain $p$ at 0,05. Individual results are reported below.

**TABLE IV**

<table>
<thead>
<tr>
<th>Extraversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean difference</td>
</tr>
<tr>
<td>Standard error</td>
</tr>
<tr>
<td>$t$</td>
</tr>
<tr>
<td>$t^2$</td>
</tr>
</tbody>
</table>

Critical $T^2 = 48,9$

$p < 0,05$

$t^2$ is significant at 0,05, thus the $H_0$ is rejected for this variable. Inspection of the means indicates that the depressed group scored higher than the non-depressed group, i.e. in the direction predicted by $H_1$. 
TABLE V

Neuroticism

<table>
<thead>
<tr>
<th>Mean difference</th>
<th>2,4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard error</td>
<td>0,49</td>
</tr>
<tr>
<td>t</td>
<td>4,9</td>
</tr>
<tr>
<td>$t^2$</td>
<td>23,99</td>
</tr>
</tbody>
</table>

Critical $T^2 = 48,9$

$p > 0,05$

$t^2$ is not significant at 0,05, thus $H_0$ is accepted for this variable. The difference in the means is in the expected direction, i.e. the higher scores in the depressed group can be regarded as a trend or as the result of random sampling variation.

TABLE VI

Current adjustment

<table>
<thead>
<tr>
<th>Mean difference</th>
<th>-0,49</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard error</td>
<td>0,05</td>
</tr>
<tr>
<td>t</td>
<td>-9,8</td>
</tr>
<tr>
<td>$t^2$</td>
<td>60,3</td>
</tr>
</tbody>
</table>

Critical $T^2 = 48,9$

$p < 0,05$

$t^2$ is significant at 0,05, thus $H_0$ is rejected for this variable.
Inspection of the means indicates that the depressed group scored lower than the non-depressed group which is in the direction predicted by $H_1$.

**TABLE VII**

**Condition at birth**

<table>
<thead>
<tr>
<th>Mean difference</th>
<th>0.0001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard error</td>
<td>0.04</td>
</tr>
<tr>
<td>$t$</td>
<td>0.025</td>
</tr>
<tr>
<td>$t^2$</td>
<td>0.0006</td>
</tr>
</tbody>
</table>

Critical $T^2 = 48.9$

$p > 0.05$

$t^2$ is not significant at 0.05, thus $H_0$ is accepted for this variable.

**TABLE VIII**

**Development and Functioning**

<table>
<thead>
<tr>
<th>Mean difference</th>
<th>-0.28</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard error</td>
<td>0.05</td>
</tr>
<tr>
<td>$t$</td>
<td>-5.6</td>
</tr>
<tr>
<td>$t^2$</td>
<td>31.36</td>
</tr>
</tbody>
</table>

Critical $T^2 = 48.9$

$p > 0.05$
$t^2$ is not significant at 0.05, $H_0$ is accepted for this variable. Difference in the means is in the expected direction, i.e. lower scores in the depressed group (see Section 5).

<table>
<thead>
<tr>
<th>TABLE IX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stress</strong></td>
</tr>
<tr>
<td>Mean difference</td>
</tr>
<tr>
<td>Standard error</td>
</tr>
<tr>
<td>$t$</td>
</tr>
<tr>
<td>$t^2$</td>
</tr>
</tbody>
</table>

Critical $T^2 = 48.9$

$p < 0.05$

$t^2$ is significant at 0.05, thus $H_0$ is rejected for this variable. Inspection of the means indicates that the depressed group scored higher than the non-depressed group, which is in the direction predicted by $H_1$.

TABLE X.

<table>
<thead>
<tr>
<th>Significant relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean difference</td>
</tr>
<tr>
<td>Standard error</td>
</tr>
<tr>
<td>$t$</td>
</tr>
<tr>
<td>$t^2$</td>
</tr>
</tbody>
</table>
Critical $t^2 = 48.9$
$p < 0.05$

t$^2$ is significant at 0.05, thus $H_0$ is rejected for this variable.
Inspection of the means indicates that the depressed group scored higher than the non-depressed group, which is in the direction predicted by $H_1$.

### TABLE XI.

**Current family functioning**

<table>
<thead>
<tr>
<th>Mean difference</th>
<th>1.06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard error</td>
<td>0.05</td>
</tr>
<tr>
<td>$t$</td>
<td>-21.2</td>
</tr>
<tr>
<td>$t^2$</td>
<td>449.44</td>
</tr>
</tbody>
</table>

Critical $t^2 = 48.9$
$p < 0.05$

t$^2$ is significant at 0.05, thus $H_0$ is rejected for this variable.
Inspection of the means indicates that the depressed group scored higher than the non-depressed group, which is in the direction predicted by $H_1$. 
TABLE XII.

P.S.I. Percentage score

<table>
<thead>
<tr>
<th>Mean difference</th>
<th>19.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard error</td>
<td>0.72</td>
</tr>
<tr>
<td>t</td>
<td>26.94</td>
</tr>
<tr>
<td>$t^2$</td>
<td>726</td>
</tr>
</tbody>
</table>

Critical $T^2 = 48.9$

$p < 0.05$

t$^2$ is significant at 0.05, thus $H_0$ is rejected for this variable.

Inspection of the means indicates that the depressed group scored higher than the non-depressed group, which is in the direction predicted by $H_0$.

Table XIII

Summary of results

<table>
<thead>
<tr>
<th></th>
<th>TABLE XI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>Experimental lower than control $&lt; 0.05$</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>Not significant</td>
</tr>
<tr>
<td>Current adjustment</td>
<td>Experimental lower than control $&lt; 0.05$</td>
</tr>
<tr>
<td>Condition at birth</td>
<td>Not significant</td>
</tr>
<tr>
<td>Development and functioning</td>
<td>Not significant</td>
</tr>
<tr>
<td>Stress</td>
<td>Experimental lower than control $&lt; 0.05$</td>
</tr>
<tr>
<td>Significant relationships</td>
<td>Experimental lower than control $&lt; 0.05$</td>
</tr>
<tr>
<td>Current family functioning</td>
<td>Experimental lower than control $&lt; 0.05$</td>
</tr>
<tr>
<td>P.S.I. score</td>
<td>Experimental lower than control $&lt; 0.05$</td>
</tr>
</tbody>
</table>
Scale scores of the EPI
S.D. CURRENT ADJUSTMENT

CONDITION AT BIRTH

DEVELOPMENT & FUNCTIONING

STRESS

SIGNIFICANT RELATIONSHIPS

CURRENT FAMILY FUNCTIONING

SIGNIFICANT AT 0.05 LEVEL

DEPRESSED
NON DEPRESSED

SCALE SCORES OF THE PSI
A significant at 0.05 level

S.D.  PERCENTAGE SCORE

3.83

2.40

85.7

ΨI PERCENTAGE SCORE

Significant at 0.05 level

Depressed

Non Depressed
The null hypothesis of no difference in premorbid personality is rejected with respect to one dimension of the EPI., Extraversion, and five dimensions of the PSI, namely Current Adjustment, Stress, Significant Relationships, Current Family Functioning and PSI score. The null hypothesis is accepted with respect to one dimension of the EPI., Neuroticism, and two dimensions of the PSI., Condition at Birth, and Development and Functioning.

This means that the depressed subjects were found to be less extravert but no more nor less neurotic than non-depressed subjects. Depressed subjects were less adjusted, had more stress throughout their life histories and had more difficulties in relationships with significant others than did the non-depressed group. Families of depressed subjects were also functioning less effectively than those of non-depressed subjects. However, events surrounding the birth and early development were similar in depressed and non-depressed subjects.
5. DISCUSSION

5.1 Evaluation of the findings

This study has demonstrated the difference between the premorbid personalities of depressed and non-depressed persons. This is in keeping with its aims outlined in Section 2.7. This difference is evidenced by the significant results on the Extraversion Scale of the EPI and that of the Current Adjustment, Stress, Significant Relationships, Current Family Functioning and Percentage scores on the PSI.

The results of the EPI with the Kendell and DiSciopio (1968) amendment appeared to tap the premorbid personality accurately. The dimension Extraversion distinguished between the two groups and the result accorded with most previous research, indicating that depressives are usually less extravert than non-depressives (Stenback, 1980; Thomae, 1980; Kendell and DiSciopio, 1968; Eysenck, 1970). It is noteworthy that both groups have low mean scores on this dimension. One explanation for this could be that the older person was asked to describe his premorbid personality; however, many of the Extraversion items, if answered positively, may have detracted from the qualities of "decency and dignity" which the subjects often maintained they had when younger. This they claimed was different in today's younger generation. An example would be the EPI item relating to letting themselves go at a gay party. A number of subjects answered with "No, I was not like the youngsters of today." The other explanation may be a cultural one in which being carefree, lively and a practical joker may be equated with being rude and cheeky. Although van der Spuy and Shamley (1978) found no difference between "whites" and "coloureds" on the
Extraversion dimension, they were dealing with a much younger and possibly more vociferous generation of high school and university students.

The result on the Neuroticism dimension may seem, at face value, to be surprising in that most depression is regarded as a neurotic disorder, and this dimension should therefore distinguish between the two groups. Previous research (Garside et al., 1970) indicates that this is usually the case. Closer examination of the items on the scales however, reveals that a number of them emphasize somatic difficulties. An older person may therefore, on being asked to reflect how he has been previously, compare his present often debilitated condition with an idealized conception of himself as he was previously. This may be termed the "good old days" syndrome. In fact, if compared with a study of "normal" South Africans (van der Spuy and Shamley, 1978) the scores on the present study are lower for both groups.

With regard to the PSI, the discussion of the findings will be grouped under three sections for convenience. It should be borne in mind however, that this instrument evaluates the client holistically.

(i) Findings related to present functioning

Although the PSI measures the development and functioning of the personality along a longitudinal axis, a number of subscales have a focus on the present condition of the subject. The subscale Current Family Functioning distinguishes between the two groups and the scores are in the expected direction, i.e. lower scores in the depressed subjects. Current close relationships would certainly be affected by the current symptoms of the depressed person. Expectations and
demands put on depressed individuals by those in close contact with them cannot always be met. Other factors which may exacerbate the situation would be poor living arrangements and overcrowding. As the family is the major basic unit of the total social system, it would be the first to be affected. This scale excludes, for obvious reasons, the family of origin. It concentrates rather on present close relationships while tapping the influence of parenting on the subject. The cause-effect controversy is of importance in this subscale. It is not known whether the current functioning within the family unit could have precipitated or contributed to the subject's depression or whether the family's having to deal with a depressed person contributed to its inefficient functioning.

Similarly, the difference on the PSI Percentage Score may be ascribed to the effect of the depressed person's symptoms on the full spectrum of functioning. It is noteworthy that, although the depressives score much lower than non-depressives, even the latter have a much lower index score than the "normals" in a previous study (Ramphol, 1972). This may be attributed to the effect of common problems associated with all the elderly which would reflect upon their overall functioning.

Current adjustment, referring to situational attempts to deal with external stimuli would probably be the subscale most severely affected by the depressed state. As a measure of the person's ability to cope, it easily distinguishes between the subjects.

(ii) Retrospective findings

Past aspects are reflected mainly by the subscales, Condition at Birth, Development and Functioning, Stress, and Significant Relationships.
With regard to Development and Functioning, there appears to be a trend towards lower scores in the depressed group. This does not reach significance for a number of possible reasons, which become clear on inspection of the five factors which comprise this scale.

(i) The physical aspect which takes into account physical factors throughout life. As the subjects have been matched on present physical morbidity, there is a possibility that one may be dealing with a pre-selected sample. Therefore a significant difference may not exist between the two groups.

(ii) The behavioural aspect which, as it is allied to childhood milestones and physical maturation, would also not be expected to contribute to a difference between the two groups. It is well-known that behavioural activities cannot precede physical development.

(iii) There do not appear to be any theoretical grounds for correlating intellectual abilities with depression.

(iv) The emotional aspect ought to be able to distinguish between the two groups. It is considered likely that the depressed subjects could have been traumatized emotionally at an early age. Yet emotionality also would be affected by physical, behavioural and intellectual factors, and not purely by life experience. Thus, if the subjects were similar on these aspects, emotional aspects may not have been enough to affect the subscale Development and Functioning.

(v) The social aspect follows the subject's pattern of interpersonal relationships. Once again, it seems that most subjects
were able to form relationships, if one uses marriage as a rough measure of the ability to form relationships.

Thus it is not entirely surprising that a difference does not appear between the two groups on this composite variable. However, it may well be useful in future research to separate out the emotional and social aspects from the other aspects of this subscale in an attempt to obtain a more detailed perspective.

(iii) Findings of past loss in depression

The subscale that appeared to epitomise the difference between the groups was that of Significant Relationships. As assessed by this subscale, loss of a significant other, either physically or emotionally, was very common amongst depressives. This factor is emphasised by Freud (1915/1973) as outlined in Section 2.3.1. This study also confirms Lloyd's (1980a, 1980b) review findings regarding the role of past loss in depression (Section 2.5.1). In the case histories of practically all the depressed subjects, there appeared to be problems surrounding either the relationship with parents or to a lesser extent, with the siblings. The relationship with mother revealed problems of untimely death, severe debilitating illness and in rare cases, violent behaviour towards the subject. Father was often absent from the home and when present, was frequently violent and aggressive, largely as a result of alcohol abuse. Although the relationships with siblings were largely satisfactory, an interesting phenomenon was a hierarchy of respect among them according to age.
5.2 Limitations of the Study

The strong feature of this study involves the sampling procedure, which would be difficult to repeat in the foreseeable future because of practical difficulties such as financial and human resources. The findings may be generalized to the population from which the sample was taken because of the random sampling technique used. However, there are certain limitations to the study which should be noted.

(i) The size of the sample

The sample was comparatively small, being only 10 subjects in each group. Although the findings generated from this study are statistically valid, a larger number of subjects would have been preferable. The total number of subjects for consideration for the larger project was 9,617, of whom 150 were chosen. Thus for another five subjects to be included, the community sample would have had to be increased up to 225 subjects or the target population greatly increased.

(ii) The suitability of the instruments

Using a combination of personality instruments appeared to have been successful. However, individually, both of the instruments used have certain drawbacks. Although the dimensions of the EPI were found to be orthogonal ($r = 0.296$; see correlation matrix in Appendix G) and reliability and validity well established, the yield of information obtained is somewhat limited. Thus, it cannot describe the premorbid personality in any depth.
The PSI is much more suitable, but also limited, in that the in-depth information which is quantified loses its unique case history character. The scoring itself tends to group together, in a section, items covering a wide area and in some cases overlapping with other sections. Ideally the PSI needs to undergo factor analysis in order to eliminate repetitive questions.

From a practical point of view, it is a laborious task to write out a case history and summary and then to answer over 200 questions. If a larger study were to be undertaken, this would certainly count against its being used. An instrument needs to be developed which could combine the advantages of both these instruments. The Minnesota-Briggs History Record (Briggs et al., 1972), if streamlined, might be worthy of consideration. However, its items would need some modification in order that it is able to be used within the South African context.

(iii) The matching procedure

Although matching was as accurately carried out as was possible, there were certain problems in the procedure. The physical morbidity scale, for example, is a total of deficiencies in various systems and although a hearing deficit might have rated a 4 (severe) it cannot always be equated with a sight defect with the same rating. However, one of the well-known drawbacks of a cumulative measure is its gross nature. This measure has proved its usefulness for screening purposes in previous studies (Gillis and Elk, 1981), although it has not yet been used as a matching variable. There thus appears to be a general need for a suitable and applicable instrument to tap this area. The instrument used in this study is easily administered and scored and provides a partial solution.
(iv) **Experimenter effect**

This refers to the knowledge of the experimenter of who constitutes the depressed and non-depressed groups, thus contaminating the findings. Although attempts were made to eliminate these effects by employing a "blind" measure, described earlier, it is difficult to negate clinical experience and judgment from the interview situation. There are no easy solutions to this problem, as clinical experience, judgment and sensitivity will always be necessary in dealing with emotional material such as a case history.

(v) **The retrospective nature of the study**

This is probably the most serious criticism of the study, as retrospective accounts are often coloured by the subject's present state. Thus, subjects may distort recollections as a function of their present depressed mood. With regard to the EPI, this effect is largely eliminated by use of the Kendell and DiScipio modification (1968). However, it is probably not possible to entirely eliminate the effect of the present state.

The PSI is more likely to be affected by the present depressed mood and there is no safeguard to prevent this from occurring. In his recollections of childhood, the subject may be liable either to exaggerate the difficulties experienced, or to minimise these. Thus, whether the PSI data may be regarded as accurate and factual is questionable. However, this problem is a perennial one when dealing with clinical historical material. One solution would be the use of informants to corroborate the data of the subjects. While this may be a relatively simple task in the histories of children and young adults, the problem
becomes more difficult when dealing with elderly subjects. Invariably the parents and many of their contemporaries are deceased. Often their lifelong friends are presently geographically far removed from them. In a number of cases, the Group Areas Act had caused not only disruption, but also dispersion of acquaintances. Within the confines of the study, contemporaries were not able to be traced and interviewed. However, a number of the subjects' spouses could recall and corroborate the data regarding the family of origin of the subject as many had been acquainted since childhood. Moreover, many of the subjects could give excellent detailed accounts of their lives. Exact dates were often remembered and most subjects could supply information regarding their birth and milestones which had been related to them by their parents. This may have been largely due to the fact that subjects with cognitive impairment had been excluded from this study. While this is an impression that emerged in relation to some of the subjects, it would be desirable to attempt to formally corroborate these in future studies.

5.3 Implications for theory and clinical practice

In addressing the problem of the premorbid personality of the depressed
elderly person, the present study has used two theoretically diverse methods of quantification, the factor analytically based EPQ and the psychoanalytically based PSI. It has been noted that comprehensive personality studies of the older person are not common. Thus the implications of the present study may prove valuable both in terms of the theory of depression in late life as well as the management of such depression.

The first, and by far the most important implication of this study, is the finding that a construction of the profile of the premorbid personality of the elderly depressed person is possible. This profile could then be tested within a therapeutic setting in terms of Zung's (1980) triadic model (Section 1.8). For example, personality development characterized by adverse reaction to previous loss experience may be weighed against later personality functioning. Thus decisions regarding the relative loading of physical therapy over psychotherapy could be decided on the basis of personality strengths.

The present study concurs with most of the literature regarding the fact that premorbidly, depressives are less extravert than non-depressives (Kendell and DiScipio, 1968; Garside et al, 1970). Theoretically one could assume that the depressed person faces frustration and rejection in early life experiences, and he begins to shy away from forming relationships with others. He is afraid of further rejection. He thus becomes more "introverted", i.e. turning into himself, accompanied by lack of interest in the outside world.

Further evidence for the above explanation is provided by the life history data of the PSI especially regarding significant relationships. The histories abound with examples of parental deprivation, often as a result of death or separation. Coupled to this deprivation is an ambivalence borne of parental ill-treatment, alcoholism and favouritism. This finding regarding life history concurs with extensive literature concerning separation loss and other stress events in their relationship
to depression (Beck, 1966; Freedman, Kaplan and Sadock, 1976; Lloyd, 1980a and 1980b; Roy, 1981). In this study the percentage of depressives suffering deprivation seems to be higher than the 25% estimated by Freedman and Kaplan (1976). In fact, loss as a theme appears in the life histories of most depressives in the study. Dynamically, it can be postulated that depression in later life is the reactivation of the childhood state of helplessness and dependency in vulnerable individuals (Beck, 1966; Bergman, 1982).

Related to this implication would be the importance of previous stress on future depression. The stress experienced by depressed persons seems to have been overwhelming and took the form of material deprivation, violence in the family, parental strife and sudden changes of domicile. This also accords with the literature (Fiske, 1980) which relates personality patterns, depression and stress response. Contemporarily however, emphasis seems to be placed on recent stress events by authors such as Paykel et al. (1970) and Lloyd (1980b).

Another important implication is the finding that Neuroticism is not a factor in premorbid personality (it should be noted however, that there is a non-significant trend towards increased Neuroticism in depressed persons). This does not accord with a number of previous findings (Kendell and DiScipio, 1968; Garside et al, 1970) and as such should be analysed carefully. Neuroticism is characterised by moodiness, worrying, tension as well as physical symptoms of anxiety (Kline, 1968) and neither group meets with these criteria. Klerman (1971) provides some explanation by contrasting the non-neurotic premorbid personality of the "endogenous" depressive with the maladaptive personality patterns of individuals prone to neurotic depression.
As there was no attempt to delineate depressed subjects along these lines in the present study, it is possible that a heterogenous group of depressives is being investigated. An investigation of the PSI data reveals that a minority of the depressed sample had relatively trouble-free childhoods. However, this aspect may certainly yield significant results in a further investigation and the present findings can be considered to be rather tenuous.

A further implication of clinical relevance is the demonstration of the effect of a depressed patient's personality and symptoms on his immediate surroundings. It is clear that both within his family and society, the depressed person is maladjusted and has an adverse effect upon both. The family is prevented from functioning effectively. The depressed person himself feels maladjusted and very often a burden to himself and his family, forming a vicious circle of ever-increasing maladjustment. Hostility, in the form of grievances is directed towards his family as well as society at large, which seems to him to be unconcerned with his plight. Material assistance seems to him to be of major importance and financial and other aid such as spectacles, dentures and hearing aids were often the requests which were made to the researcher. Two important factors for clinical practice flow from the above. The first is that family therapy for elderly depressed people is essential. This technique is outlined in detail by Steuer (1982), although she does not stress the importance of the extended family sufficiently. The second factor is that as the elderly depressives' material deficiencies have a basis in reality, traditional methods of purely emotional support may not be sufficient. This may have to be supplemented by support of a material kind.
Another implication for theory and clinical practice is the finding that peri-natal factors probably do not have an influence on depression in later life. This appears to be especially valid with regard to physical factors surrounding birth and early development. This finding accords with most aetiological theories of depression (Freedman, Kaplan and Sadock, 1976; Zung, 1980; Blazer, 1982).

Finally, it is widely believed by "white" South Africans that the "coloureds" are a friendly, outgoing and uninhibited group. This is seen as compatible with Eysenck's (1971) assertion that American blacks tend to be extraverted, which he ascribed to "Negro soul". This study serves to indicate, in agreement with a study by Singer and van der Spuy (1978) that, on the contrary, the "coloureds' Extraversion scores are low.

As Extraversion may be seen as a behavioural defence against an enforced position of inferiority, it may be hypothesised that other defences have been utilized instead. One answer may be provided by Carter (1974) who concluded that the most common clinical findings related to neurotic depression in blacks are multiple somatic symptoms. However, further research will be necessary to fully explain the dynamics of somatic symptoms which are so common amongst depressed people. Carter (1974) suggests that in the near future, a unified theory of the nature of psychophysiologic illnesses will be derived by better understanding of cultural components.

5.4. Recommendations for future research

Arising from the foregoing sections, there are a number of issues which require further investigation both in terms of facilitating more effective
treatment of elderly depressives, and in clarifying theoretical aspects of the premorbid personality of these patients. Future research is thus indicated in the following directions:

(i) Significant relationships

This aspect was seen to be closely allied to depression in late life. Although the PSI yielded some data in this regard, more specific and detailed information is required. A more extensive investigation of all aspects of significant relationships is therefore necessary. This is especially important in regard to the loss of important figures in childhood and adolescence. The loading given to these earlier difficulties and that given to recent life events needs to be compared as to their relative importances. In this way, a treatment regime may be more appropriately devised.

(ii) The extended family of the elderly depressive

The study found that there was a relationship between the functioning of the family and that of the depressed person. Many in the community sample resided with their extended families. They often seemed to derive support, both emotional and material, from the family. It is not known to what extent the family provides social support which may be playing a part in prevention of a depressive episode. Thus, indepth research needs to be undertaken to investigate the protection that the extended family affords the elderly person against the vicissitudes of old age.

(iii) Data gathering

Adequate assessment cannot be undertaken without verification of the
validity of specific test measures for criteria of relevance to older adults. Thus, research needs to be directed at standardization of tests for the elderly population of South Africa. If appropriate, specific tests need to be constructed, taking into account both socio-cultural and socioeconomic aspects.

Future research therefore requires that the ageing person be studied within the dynamics of his environment rather than in isolation. In this way the explosion of knowledge taking place in the field of gerontology will not only be a quantitative one but will also expand in its qualitative value.

5.5 Conclusion

The present study set out to investigate the assertion that differences exist between the premorbid personality development and functioning of depressed and non-depressed elderly persons. This objective was realised in that differences were seen to exist on the majority of dimensions measured. Moreover, use of two theoretically diverse instruments enabled the researcher to successfully plot a profile of the premorbid personality of the depressed elderly person.

If the goal of clinical research is that of more effective patient management, then the study does make a contribution. It provides some answer to the question frequently posed regarding psychiatric treatment "What treatment, by whom is more effective for this individual with that specific problem, and under which set of circumstances?" (Bergin, 1971).
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APPENDIX A

Physical and psychiatric disorders common to
the elderly
Physical Disorders Common to the Aged

A. Heart Diseases

These play a large part in geriatrics as cardiac failure accounts for 15% of admissions to geriatric departments. In industrialised countries, these are the most common in terms of incidence and fatalities. Ischaemia is regarded as the most important class of heart disease in the elderly. Over the age of 70 years, incidence and prevalence rise rapidly and male preponderance becomes progressively less marked. A condition resulting from coronary heart disease is acute myocardial infarction where the blood supply to the heart is cut off. The symptoms include pain and shock but many elderly patients complain only of dizziness, breathlessness and some confusion and it is not unusual for no symptoms to be evident and diagnosis is only confirmed on ECG. Epidemiological studies show that cardiac illness is positively associated with social class and middle classes are often the victims. Other cardiac diseases include congestive cardiac failure and angina pectoris (Hodkinson, 1975).

B. Hypotension

Symptoms here include giddiness, light headedness and loss of consciousness momentarily and the drop in blood pressure easily occurs when there is a sudden change of position from sitting or lying to standing. Management usually consists of treating associated disease conditions or withdrawal of provocative drugs plus general measures.
C. Hypertension

Blood pressure rises with age although beyond 65 years it tends to fall off. Although it is not possible to give a firm ruling on what is regarded as "normal" blood pressure in old age, a diastolic level 110mm Hg or more is regarded as hypertensive; if this is sustained, (many old patients appear to have a particularly labile blood pressure) and a proper assessment is necessary before a diagnosis of hypertension is made. The consequences of hypertension include left ventricular hypertrophy and eventually left ventricular failure. Cerebro-vascular disease can also result from this condition. If the hypertension is associated with obesity, treatment by diet alone may be indicated (Hodkinson, 1975).

D. Atherosclerosis

This is the major form of arteriosclerosis in terms of prevalence and serious consequences in old age. It is the underlying factor in ischaemic heart disease, stroke, arterio-sclerotic dementia and peripheral vascular disease. It is a rather patchy disorder which initially affects the intima of arteries, leading to atheromatous plaques causing narrowing of the arterial lumen which often leads to thrombosis. Generalized atherosclerosis leads to peripheral vascular disease and aortic aneurism (Bronklehurst, 1973).

E. Cerebro-Vascular Accident

Causes of this condition include cerebral thrombosis, cerebral
haemorrhage and cerebral embolism. It has an acute onset and results in neurological deficits, usually including hemiparesis. There may be different phases and in some cases stroke may rapidly exhibit complete recovery, usually then being referred to as "transient ischaemic" attacks. After the first stroke there is thought to be a 50% survival rate, and is thus regarded as a major affliction in old age (Hodkinson, 1975).

F. Chest Disease

The old person seems to be susceptible to respiratory infection, which has a high morbidity and high mortality. Broncho-pneumonic changes are found in about half of post mortem examinations.

1. Acute Bronchitis

This often commences with a dry cough, wheezing, breathlessness and pyrexia. When associated with severe bronchospasm, it can be a common cause of deaths.

2. Chronic bronchitis

Initially it follows a cold and later develops into bronchitis and occurs often in obese patients who suffer sudden changes in temperature. This condition is aggravated by smoking.

3. Broncho-Pneumonia

These infections are common and may take the form of "hypostatic" pneumonia, often the cause of death in debilitated old patients. Very often it occurs in recumbent patients, where there is loss
1. **Iron deficiency anaemia** usually results from chronic blood loss as a result of carcinoma of the large bowel or stomach or prescribed anti-coagulants. Malnutrition may also be a cause. The symptoms are usually lassitude, tiredness, headache and concentration loss. Ferrous sulphate tablets are usually prescribed.

2. **Vitamin B12 Deficiency**

This is caused by lack of secretion of hydrochloric acid in the stomach which prevents absorption of Vitamin B12. Symptoms include anorexia and vague dyspepsia and patients may lose a considerable amount of weight. There may be marked mental confusion simulating a severe dementia. Treatment includes $\text{B}_{12}$ by injection continued regularly for life.

**J. Arthritis and Rheumatism.**

1. **Rheumatoid Arthritis**

This condition often commences at an early age but is continued into old age. Severe pain of the joints, stiffness and swelling are the usual symptoms. There is often a raised erythrocyte sedimentation rate with loss of weight. Anti-inflammatory medications are usually prescribed.

2. **Osteo-Arthrosis**

This condition is precipitated by degeneration of the articular cartilage and may result in shortening of the affected limb. It has an insidious onset with severe pain and tiredness. With
increasing stiffness, the patient becomes less ambivalent. Analgesics are usually prescribed.

3. Non-Articular Rheumatism

In this condition there is pain without an obvious cause and muscle ligaments and tendons are involved. There is severe pain and immobility in the neck and shoulder. Treatment by infra-red heat is usually prescribed.

Functional Disorders

I. Affective Disorders

Manic Disorders - They do not appear as frequently as depression although they do make an appearance in later life. There may be the tendency to ascribe this to aggressive over-activity and poor judgment of a senile brain. Symptoms include uncontrollable excitement, flight of ideas, distractibility, impaired judgment and grandiose ideas.

Depressions - These will be dealt with in detail in a further section.

II. Paranoid States

Persecutory and/or grandiose delusions appear to be the main symptoms. Impairment of intellectual function or capacity for logic is not present. They usually respond well to phenothiazine therapy.
Schizophrenia

This is a major psychiatric disorder in which the major symptoms are blunting of affect, loosening of association in thought and communication, autism and ambivalence. In severe cases, delusions, hallucinations and ideas of reference may be present. Although this disorder does not usually appear de novo in old age, there are many old people who have been diagnosed early in life as schizophrenic and have carried them to old age. Usually those who present with this disorder in later life have well-preserved personalities and maintain their independence quite well, although bizarre systematized delusions of a persecutory nature are elicited on presentation. The prognosis is usually good in these cases (Slater and Roth, 1974).

Organic Brain Disorder

These are mental disorders which are associated with impairment in function or death of brain tissue. The following features are usually evident: disorientation for time, place, and person; impairment of intellectual functions; disturbances and impairment of memory; impairment of judgment; defects in comprehension or grasp; evidence of impaired immediate recall; and emotional lability (Pitt, 1980).

Acute Brain Syndrome

This condition is usually irreversible and is usually associated with an acute febrile, debilitating or exhausting illness.
accompanied by dehydration or malnutrition. There are many precipitating causes which include infections, fracture, congestive cardiac failure and renal disease.

Acute brain syndrome usually involves a fluctuating level of awareness, varying from a mild confusional state to stupor or active deliriums. Hallucinations, restlessness, helplessness and bewildered confusion and a tendency to wander, both physically and verbally, is present. The mortality rate is approximately 40% and the presence of acute brain syndrome is usually evidence that developing brain syndrome is present (Slater and Roth, 1974).

**Chronic Brain Syndrome**

This can be defined as decrease to a critical point of the functional neuronal mass. Diffuse brain damage is necessary for the emergence of signs of chronic brain syndrome. It commonly appears after the age of 70 years with an insidious imperceptible onset. Thus the elderly person may pass from normal old age to senile psychosis with no abrupt changes. Errors in judgment, decline in personal care and habits, and impairment in capacity for abstract thought, a lack of interest and apathy are early signs. Often a loosening of inhibitions is seen. With deterioration, the traditional signs of organic dysfunction are more evident. Rambling, incoherent speech and fabrication are common as well as sleeplessness and restlessness. Paranoid symptoms may be exacerbated or be seen for the first time (Freedman, Kaplan and Sadock, 1980).
Cerebral Arteriosclerosis

This disorder usually occurs much earlier than senile dementia, before the age of 65 years. It is caused by inadequate cerebral blood flow associated with cerebral arterial disease leading to tissue death. It is postulated that much of the accompanying dizziness, headache and confusion is due to minute cerebral infarction. If this occurs on a much larger scale, a cerebral vascular accident occurs. The progress of arteriosclerosis is different from that of senile dementia in that progress may be by stepwise rather than a steady deterioration. Arteriosclerotic variability also occurs, in which there is day-to-day variation of mental symptoms. Other than this, the general course and manifestations of arterio-sclerosis resemble that of senile dementia. This disorder affects more males than females and may be associated with hypertension (Slater and Roth, 1974).
Appendix B

Descriptions of the Measures used for Matching
Measures used for Matching  (all items were scored by trained interviewers)

All subjects in the entire community sample were rated on the following scales:

i) Age: Grouped in five year periods from 65 years upwards to 95+ years.

ii) Sex

iii) Marital status: whether married, single, divorced or widowed.

iv) Occupation: this is defined as the highest position attained. If the respondent had never worked or is a housewife, rating is according to the occupation of the husband where applicable, or if no husband, that of father. Categories are professional, technical, artisan/skilled or unskilled/semi-skilled.

v) Occupation at present: whether employed full-time, part-time, retired or housewife.

vi) Living Arrangement: This refers to with whom the subject resides, whether living alone, boarding with non family, or living with family.

vii) Type of accommodation: whether sleeping rough, e.g. "Bergies", makeshift, shanty, servant quarters on owner's land, a rented council flat/house or flat/house either rented, owned but not belonging to the Council.

viii) Support networks

(a) Friends/family involvement: this reflects the amount
of involvement of the subject with his friends and family. He may be very involved, moderately involved or isolated.

(b) **Friends/family support**: This reflects the amount of support given to the respondent by the family or friends: they may be very supportive, mildly supportive or rejecting.

ix) **Assessment of physical morbidity**: this is based on the amount of disability caused by pain, dyspnoea, visual problems, stiffness/weakness, incontinence or other physical problems.

x) **Life events schedule** (Dohrenwend, Krasnoff, Askenasy and Dohrenwend, 1978): this is composed of 70 items which together provide a reasonable, comprehensive review of the changes occurring in the subject's life-world during six months preceding the interview. It is composed of eleven sections tapping the following areas: work, residence, finance, school and training, health, legal, love and marriage, children, family, rituals/customs and other. All changes in these areas are noted and the impact which these had upon the subject's life.
Appendix C

The Hamilton Depression Rating Scale
<table>
<thead>
<tr>
<th>No.</th>
<th>Range of Scores</th>
<th>Symptom.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0-4</td>
<td>Depressed Mood:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gloomy attitude, pessimism about the future</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feeling of sadness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tendency to weep</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sadness, etc. ..........1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Occasional weeping ..........2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Frequent weeping ..........3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extreme symptoms ..........4</td>
</tr>
<tr>
<td>2</td>
<td>0-4</td>
<td>Guilt:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-reproach, feels he has let people down</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ideas of guilt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Present illness is a punishment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Delusions of guilt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hallucinations of guilt</td>
</tr>
<tr>
<td>3</td>
<td>0-4</td>
<td>Suicide:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feels life is not worth living</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wishes he were dead</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Suicidal ideas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Attempts at suicide</td>
</tr>
<tr>
<td>4</td>
<td>0-2</td>
<td>Insomnia, initial:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Difficulty in falling asleep</td>
</tr>
<tr>
<td>5</td>
<td>0-2</td>
<td>Insomnia, middle:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Patient restless and disturbed during the night</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Waking during the night</td>
</tr>
<tr>
<td>6</td>
<td>0-2</td>
<td>Insomnia, delayed:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Waking in early hours of the morning and unable to fall asleep again</td>
</tr>
<tr>
<td>7</td>
<td>0-4</td>
<td>Work and Interests:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feelings of incapacity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Listlessness, indecision and vacillation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Loss of interest in hobbies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Decreased social activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Productivity decreased</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unable to work</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stopped working because of present illness only ..........4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Absence from work after treatment or recovery may rate a lower score).</td>
</tr>
<tr>
<td>8</td>
<td>0-4</td>
<td>Retardation:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Slowness of thought, speech and activity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Apathy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stupor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Slight retardation at interview ..........1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Obvious retardation at interview ..........2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interview difficult ..........3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Complete stupor ..........4</td>
</tr>
<tr>
<td>Item No.</td>
<td>Range of Scores</td>
<td>Symptom.</td>
</tr>
<tr>
<td>---------</td>
<td>----------------</td>
<td>----------</td>
</tr>
<tr>
<td>9</td>
<td>0-2</td>
<td>Agitation: Restlessness associated with anxiety</td>
</tr>
<tr>
<td>10</td>
<td>0-4</td>
<td>Anxiety, psychic: Tension and irritability Worrying about minor matters Apprehensive attitude Fears</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>Anxiety, somatic: Gastrointestinal, wind, indigestion Cardiovascular, palpitations, headaches Respiratory, genito-urinary, etc.</td>
</tr>
<tr>
<td>12</td>
<td>0-2</td>
<td>Somatic Symptoms, Gastrointestinal: Loss of appetite Heavy feelings in abdomen Constipation</td>
</tr>
<tr>
<td>13</td>
<td>0-2</td>
<td>Somatic Symptoms, General: Heaviness in limbs, back or head Diffuse backache Loss of energy and fatiguability</td>
</tr>
<tr>
<td>14</td>
<td>0-2</td>
<td>Genital Symptoms: Loss of libido Menstrual disturbances</td>
</tr>
<tr>
<td>15</td>
<td>0-4</td>
<td>Hypochondriasis: Self-absorption (bodily) Pre-occupation with health Querulous attitude Hypochondriacal delusions</td>
</tr>
<tr>
<td>16</td>
<td>0-2</td>
<td>Loss of Weight:</td>
</tr>
<tr>
<td>17</td>
<td>2-0</td>
<td>Insight: Loss of insight Partial or doubtful loss No loss (Insight must be interpreted in terms of patient's understanding and background).</td>
</tr>
<tr>
<td>18</td>
<td>0-2</td>
<td>Diurnal Variation: Symptoms worse in morning or evening Note which it is.</td>
</tr>
<tr>
<td>19</td>
<td>0-4</td>
<td>Depersonalisation and Derealisation: Feelings of unreality ) Specify Nihilistic ideas ) Specify</td>
</tr>
<tr>
<td>Item No.</td>
<td>Range of Scores</td>
<td>Symptom.</td>
</tr>
<tr>
<td>---------</td>
<td>----------------</td>
<td>----------</td>
</tr>
<tr>
<td>20</td>
<td>0-4</td>
<td>Paranoid Symptoms:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Suspicious</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ideas of reference</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Delusions of reference</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not with a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>persecution</td>
</tr>
<tr>
<td></td>
<td></td>
<td>depressive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hallucinations,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>quality</td>
</tr>
<tr>
<td></td>
<td></td>
<td>persecutory</td>
</tr>
<tr>
<td>21</td>
<td>0-2</td>
<td>Obsessional Symptoms:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Obsessive thoughts and compulsions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>against which the patient struggles</td>
</tr>
</tbody>
</table>

**Scoring**

- Above 35 - Very severe depression
- 25 - 34 - Severe depression
- 20 - 24 - Moderate depression
- 15 - 19 - Mild depression
Appendix D

Description of the Scales and Guide to Scoring

of the Psychosocial Index
The Psychosocial Index

a) Current adjustment

The term "adjustment" refers to the overall adaptation of the individual to internal and external stimuli and is the end product of the overall, basic reaction of the individual to the internal self and the environment (Stricklin, 1974).

b) Condition at Birth

This refers to constitutional factors which set the stage and provide the limiting framework for total personality development. It stresses both the physical condition of the infant at birth as well as the parents' capacity to meet the needs of the child.

c) Development and Functioning

There are five divisions in this category.

i) Physical - this stresses the biological influence on personality development and human behaviour and attempts to highlight any physical defect.

ii) Behavioural - this focusses on motor activity which is learnt but cannot precede physical development. At birth this may be seen as crying, grasping, yawning and stretching. There may be delay in these behavioural activities.
iii) **Intellectual-Cognitive** - this section emphasises the primary part which intelligence plays in learned responses. When the mental or intellectual defect is great, the individual is unable to learn regardless of the repetition of the experience. A life-long developmentally focussed study of an individual's overall functioning in the following areas is regarded as indicative of his intellectual/cognitive capacities;

a) relationship ability

b) ability to adapt or adjust to a changing self and environment.

c) ability to reason and think abstractly.

d) ability to learn factual knowledge and academic skills.

e) memory capacities.

f) ability to communicate.

g) development through behavioural stages.

h) autonomy and adequate self-help skills.

i) reality testing and self-understanding.

j) ability to analyse a problem and act purposefully.

iv) **Emotional** - this section attempts to investigate whether emotional responses are age and situation-appropriate. It also looks at appropriate sexual expression. Factors influencing emotionality are both situational, including fatigue, general health and time of occurrence, and environmental factors which would include conditions in the home, work
environment and attitudes of significant persons.

v) Social - this section investigates the individual's capacity to form interpersonal relationships. This normally follows an orderly pattern. As an adult, the individual should show the capacity to form a lasting one-to-one relationship with a member of the opposite sex, including genital heterosexual experience. He should also have the capacity to assume responsibility in social activities.

d) Stress

This is seen as a result of both internal and external factors. Stricklin (1974) defines internal stresses as follows:

"... occurs when id energies increase, especially when there is the threat felt by the ego, of loss of control. It also results when the super-ego pressures the ego with threats of punishment, criticism, and resulting loss of self-esteem. The degree of internal stress influences and is influenced by the level of personality maturation. It is seen in the demonstration of habitual personality coping patterns. The degree, frequency and timing of external stress situations and their meaning to the person are also important determinants of the ego's reaction to and the ability to deal with internal stress. Internal stress can reach traumatic proportions when id tensions are dammed up and normal excitation occurs" (pp 81-82).

e) Significant Relationships

This subdivision is concerned with relationship processes or interaction
between persons. It consists of three categories:

i) Mother/Client relationship

Writers from all of the human behavioural sciences or disciplines have studied and reported on the importance of mothering on the formation of personality. The child who fails to become closely attached to its mother is retarded in his personality development from the very early stages because of failure to gain a basic foundation. Therefore the mother's personality should also be evaluated.

ii) Father/Client relationship

There appear to be indications by some writers that the fathering process is equally important as the mothering process in the child's total development. Since the onset of urbanization, the functions of the father have undergone a dramatic change. This section attempts to investigate the effects that this relationship has had on the client.

iii) Others/Client relationship

This section investigates the effect that siblings, peers and all others have on the client in a general way. Family relationships allow a safe place for the child to learn adaptive, non-conflictual ways to have his needs met by significant persons. What happens in sibling relationships will determine to a large extent the adjustment the child makes when he leaves the family group and enters the world of peers.
f) **Current Family Functioning**

This section investigates the relation of the family to the social system. Roles, role expectations and demands of the social system put strain on individuals. Sometimes the emotional needs of the individual cannot be met by the family. An attempt is also made to highlight the differences in families although they are in the same neighbourhoods and have many similarities. An understanding of the crises in life that tend to disrupt the family balance and functioning is evaluated.

g) **Community Resources**

These are seen as usable strengths outside the client and include relatives, friends, religious, education and health institutions and traditional social welfare services. This subsection will not be relevant to the present study and thus will not be evaluated.

**Scoring of the PSI**

After case history data is collected, the appropriate true/false questionnaire is completed. The total number of the answers in each of the categories and subcategories are written as raw scores on the PSI face sheet. The appropriate index and sub-index scores are entered. The total of the index scores is determined which is the PSI percent score. A graphic representation of the data is then made on the face sheet.
### PSYCHO-SOCIAL INDEX
#### SUMMARY WORK SHEETS

<table>
<thead>
<tr>
<th>CLIENT'S NAME</th>
<th>M/F</th>
<th>DATE OF BIRTH</th>
<th>AGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### DESCRIPTION OF CLIENT

#### DESCRIPTION OF CLIENT'S FAMILY

#### CURRENT ADJUSTMENT

#### CONDITION AT BIRTH

#### DEVELOPMENT/FUNCTIONING
- A. Physical
- B. Behavioural
- C. Intellectual
- D. Emotional
- E. Social

#### STRESS

#### SIGNIFICANT RELATIONSHIPS
- A. Mother/Client
- B. Father/Client
- C. Others/Client

#### CURRENT FAMILY FUNCTIONING

#### COMMUNITY RESOURCES

### GUIDE TO SCORING THE PSYCHO-SOCIAL INDEX

#### Statements are to be marked TRUE or FALSE

This Case is AGE GROUP _______.

#### AGE GROUPS EXCLUDED

#### CURRENT ADJUSTMENT

1. No indications of physical dysfunctioning are known.
2. No indications of sleep disturbances are known.
3. No indications of personality maturational retardation (or deviation) are known.
4. No difficulty handling anxiety, frustration, guilt or tension (manifesting itself in symptom formation) is known.
5. No difficulty in age-appropriate sexual functioning is known.
6. No fears or phobias are known.
7. No excessive withdrawal is noted.
8. No excessive aggression is noted.
9. No inappropriate personality responses to significant persons is noted.
10. Mood patterns are predominately appropriate to situation.
11. No significant conflicts in inter-personal relationships are noted.
12. No retardation in motor development is noted.
13. No immaturity in emotional development is noted.
14. No immaturity in social development is noted.
15. No difficulty in age-appropriate autonomous functioning is noted.
16. No sign of hallucinating is noted.
17. No sign of deluding is known.
18. No difficulty in reality-testing and/or confused thinking is noted.
19. No sign of hallucinating is noted.
20. No sign of deluding is known.

#### CURRENT FAMILY FUNCTIONING

1. No difficulty in age-appropriate autonomous functioning is noted.
AGE GROUPS EXCLUDED
28. No sign of other mal-adaptive defense mechanisms or personality coping patterns is noted.
29. No sign of difficulty in basic trust of others and in the capacity to form lasting, close relationships is noted.
30. The client positively participates in his family group.

CONDITION AT BIRTH
1. The gestation period was within normal limits.
2. There was nothing significantly unusual about the client's birth.
3. There were no known birth injuries.
4. No congenital defects were noted at birth.
5. At birth no difficulty with breathing was reported.
6. The mother was free of physical symptoms during the prenatal period.
7. The mother was free of emotional symptoms during the prenatal period.
8. No hereditary defects (from either of the parent's families) are suspected.

DEVELOPMENT/FUNCTIONING
A. Physical (Note: Consider influence of CONDITION AT BIRTH in answering this section)
1. No indication of hormonal malfunctioning is known.
2. Weight-height proportions are within normal limits.
3. No mal-development of sexual organs is known.
4. No evidence of visual dysfunctioning is known.
5. No sign of communication dysfunctioning is known.
6. No sign of hearing dysfunctioning is known.
7. No sign of other sensory dysfunctioning is known.
8. No sign of heart dysfunctioning is known.
9. No sign of digestive-tract dysfunctioning is known.
10. No sign of brain dysfunctioning is known.
11. No sign of other central nervous system dysfunctioning is known.
12. No sign of lung dysfunctioning is known.
13. No sign of muscular dysfunctioning is known.
14. No sign of skeletal malformation is known.
15. No sign of other organ dysfunctioning is known.
16. No sign of hypertension is known.
17. No difficulty in elimination of feces is known.
18. No difficulty in elimination of urine is known.

AGE GROUPS EXCLUDED
I, II, III.

B. Behavioural
1. No history of developmental retardation in feeding is known.
2. No history of developmental retardation in sitting is known.
3. No history of developmental retardation in crawling is known.
4. No history of developmental retardation in walking is known.
5. No history of developmental retardation in speech/language is known.
6. No history of developmental retardation in toilet training is known.
7. No history of developmental retardation in academic/scholastic learning is known.
8. No history of failure in gaining age-appropriate autonomous functioning is known.
9. No failure in acquiring appropriate self-help skills is known.
10. No indications of failure in gaining any other age-appropriate motor skill is known.

C. Intellectual
1. No sign of inability in academic/scholastic learning is noted.
2. No sign of inability to think abstractly is noted.
3. No sign of inability to adjust or adapt to the environment is noted.
4. No sign of inability to form close, lasting relationships is noted.
5. No sign of inability to reason is noted.
6. No sign of memory loss of recent experiences is noted.
7. No sign of memory loss of past experience is noted.
8. No sign of difficulty in learning verbal skills is noted.
9. No sign of difficulty in learning mathematical reading or spelling skills is noted.
10. No sign of retardation in the development stages is noted.
11. No sign of difficulty in performing self-help tasks is noted.
<table>
<thead>
<tr>
<th>AGE GROUPS EXCLUDED</th>
<th>AGE GROUPS EXCLUDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. No sign of difficulty in reality-testing is noted.</td>
<td>3. There is a capacity for basic trust in others.</td>
</tr>
<tr>
<td>13. No sign of difficulty in relating parts of a problem or a situation to the whole is noted.</td>
<td>4. Object-choices for expressions of anger are appropriate.</td>
</tr>
<tr>
<td>14. No sign of difficulty in analysing a problem or a situation and dealing with the parts in a realistic manner is noted.</td>
<td>5. Object-choices for sexual expression are appropriate.</td>
</tr>
<tr>
<td>15. No sign of difficulty in self-awareness of strengths and weaknesses is noted.</td>
<td>6. Capacity to be a part of a peer group is appropriate.</td>
</tr>
<tr>
<td>16. No sign of lack of capacity to act purposefully is noted.</td>
<td>7. Capacity to work co-operatively with others is appropriate.</td>
</tr>
<tr>
<td>17. No sign of inability to think rationally is noted.</td>
<td>8. Capacity to share is appropriate.</td>
</tr>
<tr>
<td>18. No sign of inability to assume responsibility is noted.</td>
<td>9. Capacity to participate in heterosexual social activities is appropriate.</td>
</tr>
<tr>
<td>19. No sign of difficulty in communication is noted.</td>
<td>10. Competition in inter-personal relationships is appropriate.</td>
</tr>
<tr>
<td>20. No other sign of difficulty in intellectual functioning is noted.</td>
<td>11. Dependency in inter-personal relationships is appropriate.</td>
</tr>
</tbody>
</table>

**D. Emotional**

1. There is age-appropriate capacity to tolerate frustration.
2. There is no need to avoid situations which are stimulating.
3. There is a capacity to handle stimulation without emotional outbursts.
4. Emotional responses are appropriate to situations.
5. Feelings of anxiety are appropriate to situations.
6. Feelings of guilt are appropriate to situations.
7. Feelings of tension and/or frustration are appropriate to situations.
8. There is age-appropriate bowel control.
9. There is age-appropriate bladder-control.
10. Types of expression of anger are appropriate to situations.
11. Types of expression of anger are age-appropriate.
12. Degree of expression of anger is age-appropriate.
13. Type of sexual expression is appropriate to situations.
14. Frequency of sexual expression is appropriate.
15. There is an age-appropriate capacity to postpone gratification and satisfaction.
16. There is healthy balance between optimism and pessimism.
17. Over-all emotional maturation and functioning is age-appropriate.

**E. Social**

1. Capacity for intimate inter-personal relationships is age-appropriate.
2. Responses to and expectations of authority figures are age-appropriate.

---

**STRESS**

1. No sign of congenital defect is noted.
2. Maternal attitudes towards the client were not stressful.
3. The client's over-all relationship with his mother was not stressful.
4. No evidence that the mother has been too involved with the client during the maturation process (thus too stimulating) is noted.
5. Paternal attitudes towards the client were not stressful.
6. The client's over-all relationship with his father was not stressful.
7. No evidence that the father has been too involved with the client during the maturation process (thus too stimulating) is noted.
8. No history of overly-stimulating sexual experiences is known.
9. No evidence that birth of siblings or relationships with siblings have been overly stressful.
10. No evidence exists that the move from home to peer relationships was overly-stressful.
11. No evidence exists that relationships with significant persons besides parents or siblings has been overly-stressful.
12. No history of traumatic separations from the mother is known.
13. No evidence of overly-stressful illnesses exists.
AGE GROUPS EXCLUDED

14. No evidence of physical trauma exists.
15. No evidence exists that the developmental move from home to school was overly-stressful.
16. No evidence exists that the exacerbation of sexual feelings in adolescence was overly-stressful.
17. No evidence exists that the formation of intensive heterosexual relationships in adolescence was overly-stressful.
18. No evidence exists that the move from dependency upon the family to increased autonomous functioning was overly-stressful.
19. No evidence exists that experiencing parental marital discord was stressful.
20. No evidence exists that family socio-economic standing has been stressful.
21. No evidence exists that family religious influences has been stressful.
22. No evidence exists that other cultural factors have been stressful.

SIGNIFICANT RELATIONSHIPS
A. Mother/Client  
(Note: Surrogate mothers should be evaluated in this section).
1. The mother's basic personality is conducive to good mothering.
2. The mother's cultural-socio-economic developmental background enhances her capacity to mother.
3. The mother's attitude towards parenting enhances her functioning as a mother.
4. The mother has had no major physical or emotional trauma that interfere with her capacity to mother.
5. The mother's attitudes towards the client do not interfere with her capacity to mother.
6. The mother has had no major physical or emotional trauma that interfere with her capacity to mother the client.
7. The mother's emotional giving has been adequate.
8. The mother's physical giving has been adequate.
9. The mother has made a positive approach to discipline, with consistent and realistic limit-setting.
10. Parents agree on discipline and limit-setting.
11. The mother received positive emotional support from her husband during the client's first seven years of life.
12. No significant separations between mother and client occurred during the developmental years.

AGE GROUPS EXCLUDED

13. A good mothering experience is reflected in the client's personality.
14. A positive response to the mother during the developmental years is reflected in the client's history.
15. No major physical or emotional factor has interfered with the client's capacity to relate to his mother and to maintain normal maturation.
16. The client's response to discipline and limit-setting during the maturational years reflects adequate and positive maternal handling.
17. Stage by stage during the maturational years, most of the client's needs to be mothered were met.
18. The timeliness of the client's birth was positive for the mother.

B. Father/Client  
(Note: Surrogate fathers should be evaluated in this section).
1. The father's basic personality is conducive to good fathering.
2. The father's cultural-socio-economic development background enhances his capacity to parent the client.
3. The father's attitudes towards parenting enhance his functioning as a father.
4. The father has had no major physical or emotional trauma that interferes with his capacity to father.
5. The father's attitudes towards the client do not interfere with his capacity to father.
6. The father has had no major physical or emotional trauma that interfere with his capacity to father the client.
7. The father's emotional giving has been adequate.
8. The father's physical giving has been adequate.
9. The father has made a positive approach to discipline with consistent and realistic limit-setting.
10. Parents agree on discipline and limit-setting.
11. The father received positive emotional support from his wife during the client's first seven years of life.
12. No significant separations between father and client occurred during the developmental years.
13. A good fathering experience is reflected in the client's personality.
14. A positive response to the father during the developmental years is reflected in the client's history.
15. No major physical or emotional factor interfered with the
client's capacity to relate to his father and to maintain normal maturational needs.

16. The client's response to discipline and limit-setting during the maturational years reflects adequate and positive paternal handling.

17. Stage by stage during the maturational years, most of the client's needs to be fathered were met.

18. The timeliness of the client's birth was positive for the father.

C. Others/Client

1. Birth of sibling(s) did not produce unusual stress in the client.

2. Ordinal position among siblings has not been stressful to the client.

3. Interaction between client and siblings has been primarily positive.

4. Client and siblings have not experienced an unusual degree of rivalry.

5. No evidence of "favouritism" of one child in the family is indicated.

6. The client's capacity to share with peers is age-appropriate.

7. The client's capacity to be a part of a group is age-appropriate.

8. The client's capacity for close friendships is age-appropriate.

9. The client's choice of friends according to sex is age-appropriate.

10. The chronological ages of peers is appropriate for the client's age and educational attainment level.

11. The client has gained the capacity to stand up for himself and protect his rights among peers.

12. The client is not unduly concerned about peers' feelings and attitudes toward him, i.e. his self-esteem does not primarily depend upon positive evaluation by others.

13. The client's relationship with any significant person (other than parents, siblings and peers) shows no negative influence upon the client's personality.

Omit all questions for age groups IVb and Vb.

1. Family functioning is enhanced by the mother's basic personality.

2. Family functioning is enhanced by the father's basic personality.

3. Family functioning is enhanced by the parents' marital relationship.

4. Family functioning is enhanced by the family's cultural experiences.

5. Family functioning is enhanced by the family's religious practices.

6. Family functioning is enhanced by the family's socioeconomic status.

7. Family functioning is enhanced by the intelligence of the parents.

8. The mother has sufficient motivation to use assistance outside the family when it is needed.

9. The father has sufficient motivation to use assistance outside the family when it is needed.

10. Family functioning is enhanced by the presence of extended family members living in the same household.

11. Family functioning is enhanced by the father's vocational experience.

12. Family functioning is enhanced by the mother's activities outside the family which increase her self-esteem.

13. Family values and standards of the parents are compatible.

14. Family functioning is enhanced by the influence of the mother's parents.

15. Family functioning is enhanced by the influence of the father's parents.

16. Family functioning is enhanced by the mother-client relationship.

17. Family functioning is enhanced by the father-client relationship.

18. The family has sufficient strength to deal with stressful situations which arise in most families.

19. No indication of breakdown in family equilibrium as evidenced by symptoms of maladjustment of any family member, indicated.

20. Parents adequately meet one another's sexual needs.

21. Parents adequately meet one another's dependency needs.

22. Parents adequately meet one another's needs for closeness.

23. Family functioning is enhanced by the allocating of roles (among family members) in order to meet the economic needs of the family.

24. Family functioning is enhanced by the allocating of roles.
CURRENT FAMILY FUNCTIONING - SECTION "b"

1. Client's functioning is enhanced by cultural experiences.
2. Client's functioning is enhanced by religious practices.
3. Client's functioning is enhanced by socio-economic status.
4. Client's functioning is enhanced by intelligence.
5. Client's functioning is enhanced by his vocational experience.
6. Client's functioning is enhanced by interests and activities which increase his self-esteem.
7. Client's functioning is enhanced by the influence of his mother.

COMMUNITY RESOURCES: (Note: If no resources are needed, the Score automatically becomes "T")

1. Immediate availability of services is compatible with the severity of the client's needs.
2. Family strengths and motivation are sufficient to help client.
3. Family motivation is sufficient to make use of community resources.
4. Availability of community agency services is compatible with the identified needs of the client.
5. No complicating factors prevent the client's receiving help from community resources, i.e., long waiting lists.
6. Extended family members are available to help the client and/or his family.
7. A religious institution and clergy are available to help the client and/or his family.
8. Type of help needed and wanted by the client and his
ACE GROUPS EXCLUDED

family is compatible with available community resources.

9. No unchangeable constitutional problem is exhibited by the client.

10. Community resources are available to improve constellation problems.

11. Close friend(s) are available to help the client and/or his family.

12. Close friend(s) living with the client are willing to help him.

PYCHO-SOCIAL INDEX

SCORES

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ADJUSTMENT

CONDITION AT BIRTH

DEVELOPMENT/FUNCTIONING

Sub-Scores

PHYSICAL

BEHAVIORAL

INTELLECTUAL

EMOTIONAL

SOCIAL

Total

STRESS

SIGNIFICANT RELATIONSHIPS

Sub-Scores

MOTHER/CLIENT

FATHER/CLIENT

OTHERS/CLIENT

Total

CURRENT FAMILY FUNCTIONING

COMMUNITY RESOURCES

TOTAL INDEX SCORE

DIAGNOSTIC SCORE

RESOURCES SCORE

TOTAL INDEX SCORE

PSY/SKORE

CLIENT'S NAME:

M/F DOB:

AGE:

Copyright: J.L. Stricklin

Examiner:

Date:

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Appendix E

Raw data for matching the depressed and non-depressed subjects
Appendix F

Raw Data for the Groups on the EPI and PSI
Appendix G

Correlation matrix of scores of depressed and non-depressed groups
### Correlation Matrix

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