AN EXAMINATION OF SOME PROPOSED CORRELATES
OF
DEPRESSIVE ILLNESS

Thesis submitted to the Department of
Psychology, University of Cape Town, in partial
fulfilment of the requirements for the degree of
Master of Arts in Psychology.

by

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October, 1976

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AN EXAMINATION OF SOME PROPOSED CORRELATES OF DEPRESSIVE ILLNESS

Rosemarie Krenz

Ten depressed subjects, ten recovered subjects and ten control subjects were assessed by the use of the Beck Depression Inventory, the Hostility Direction of Hostility Questionnaire, the Rotter Internal-External Control Scale and the Bene Anthony Family Relations Test.

The depressed subjects differed significantly from the recovered and control group in the amount of hostility shown, and from the control group in the direction of hostility. Depressives did not differ significantly from the other two groups in their scores of the amount of internal control, nor in the way they perceived family relations in childhood.

The results were seen to support Freud's and Bibring's theories concerning amount and direction of hostility. Rotter's internal-external control hypothesis could not be demonstrated. Nor did family feelings in childhood contribute to Bibring's theory of helplessness. The Family Relations Test was not able to distinguish between family relations of depressives and non-depressives.

INTRODUCTION

Depressive illness has interested many research workers in the last few years and numerous perspectives have been adopted to account for its nature and development.

Depression is viewed as operating on three levels, namely the chemical, the psychodynamic and the behavioural levels.
Depending on the severity of the illness, there may be reversible, functional derangement of the diencephalon (Akisal et al., 1975).

With regard to hostile impulses in the depressive, Freud's psychoanalytic model conceives of hostility as resulting from object loss, which in turn engenders loss of self esteem and consequent retroflexed anger. (Freud, 1917).

Bibring (1965) also discusses the hostility of the depressive. The author focussed on helplessness as the core problem in all manifestations of depressive illness. Once the person has regained his self-esteem and is no longer helpless, he is able to release the aggressive impulses and direct them against the object world; he is on the way to recovery.

Within the framework of the above two models, it is proposed to examine the amount as well as the direction of hostility in the depressed person.

It is also proposed to investigate whether there is a connection between Rotter's social learning theory and the problem of internal-external control, and Bibring's theory of helplessness. According to Rotter (1972), invalidating experiences lead to an inability on the part of the individual to perceive reinforcement as contingent upon his behaviour. An evaluation of the locus of control in the depressive will elucidate whether Rotter's theory applies.

Furthermore, within Bibring's framework, it is proposed to investigate whether family relations in childhood contribute to helplessness in adulthood (Bene, 1965). It is hypothesized that excessive negative feelings, i.e. criticism, rejection or antagonism, or an excess of positive feelings, i.e. warmth and affection as well as overprotection and overindulgence by the parents will contribute to a lack of autonomy in the individual later on in life (ibid., Jacobson et al., 1975).
Method

Ten depressives, ten recovered depressives and ten roughly matched control subjects were assessed on the Beck Depression Inventory, the Rotter Internal-External Control Scale, the Hostility Direction of Hostility Questionnaire by Caine, Foulds and Hope, and the Bene-Anthony Family Relations Test.

Subjects were asked whether they would like to take part in a research project investigating childrearing practices and their influence on emotional difficulties later on in life.

The criterion for distinguishing between depressed and non-depressed subjects was a high score on the Beck Depression Inventory and clinical diagnosis of depressive illness by a psychiatrist or a clinical psychologist in a hospital psychiatric unit. The criterion for recovered depressives was a low score on the Beck Scale, previous diagnosis of depression and outpatient treatment.

Results

Depressives were found to be significantly more hostile but the direction of their hostility was turned inwards, manifesting itself in the form of self-criticism and guilt rather than criticism of others, the urge to act out hostility or projected delusional hostility.

No significant differences were found on the locus of control in the depressive as compared to the recovered and the control group as assessed on the Rotter scale.

On the Bene-Anthony Family Relations Test, the depressives were not found to differ significantly from the other two groups in the amount of perceived positive or negative feelings between the subjects and their parents before age 15.
Discussion

The results of the study on hostile impulses in the depressive are believed to support Freud's theory of retroflexed anger as well as Bibring's hypothesis that upon recovery the depressive will tend to direct his hostility outwards. It was furthermore borne out by the data obtained that the more depressed a person is likely to be, the more hostility he will show.

However, it could not be demonstrated that depressives are less inner directed than normals as assessed on the Rotter Internal-External Control Scale. The results may be interpreted in two ways, namely that the measuring instrument is unable to distinguish between depressives and non-depressives, or that Rotter's learning theory of internal-external control does not apply in the case of the depressive.

With regard to the assessment by the depressive of his feelings in the family before age 15 as measured on the Bene-Antony Family Relations Test, the results differ from Jacobson's findings (1975). The latter found no association between adult depression and overt childhood loss events, but did provide evidence to support an association of depriving childrearing practices to adult depression. The apparent discrepancy in results is attributed to differences in aim and methodology. The aim of the present study was to focus on the subjective feelings of the depressive. Consequently the data obtained may be interpreted as being due to the response set of the individual. Distortion in the form of exaggeration or minimizing of family feelings as well as psychiatric symptoms may have taken place. Jacobson's study was based on more objective background data in the form of social and psychiatric history data collected by experienced psychiatric social workers.
The findings of this study suggest that utilization of subjective measuring instruments alone in the assessment of depth of depression and information on family relations is insufficient and must be implemented by further objective data collecting.

References


1. **INTRODUCTION**

1.1) **Definition of depression**

Depression plays a significant part in most mental disorders, even though it may not be the main feature in all pathological conditions. It may be described, primarily as a mood disorder and is one of the most prominent causes of human misery. It often results in suicide, especially in certain age groups.

Since ancient times research has been directed at finding the causes as well as the cures for depression. Depression was known to the classical authors and in the 17th century Burt described the condition in "The Anatomy of Melancholia". But controversy regarding the nature of the depressive syndrome still continues. Akisal and McKinney, (1975) conceive of depression as "the psychobiological final common pathway of various processes that result in a reversible, functional derangement of the diencephalic mechanism of reinforcement".

In their model, depression is simultaneously conceptualised "at several levels rather than having any one to one relationship with a single event - whether defined in chemical, psychodynamic or behavioural language".

Beck, (1967) also concurs that there are many components to depression other than mood deviation. In some cases no mood abnormality at all is elicited from the person. Beck defines depression as consisting of some or all of the following features:

1. a specific alteration in mood, i.e. sadness, loneliness, apathy;
2. a negative self-concept associated with self-reproaches and self-blame;
3. regressive and self-punitive wishes, i.e. desire to escape, hide or die;
4. vegetative and self-punitive wishes, e.g. anorexia, insomnia and loss of libido;
5. changes in activity level, i.e. retardation or agitation.

Depression may at times appear in conjunction with another psychiatric disorder such as schizophrenia. For this reason most research distinguishes between primary and secondary depression, according to the Robins-Guze classification (in Zung, W.W.K., 1973). Primary depression refers to a "combination of signs and symptoms that involve varying degrees of psycho-motor and vegetative dysfunction, dysphoria, hopelessness, worthlessness, guilt and suicidal preoccupations, occurring de novo as a primary disorder of mood, that is, unrelated to a non-affective psychiatric disorder" (Akisal et al., 1975).

Secondary depression is seen as pertaining to those feelings of sadness, inadequacy and hopelessness when they occur in either a pre-existing non-affective psychiatric illness or parallel the course of a life-threatening or incapacitating medical or surgical illness (Akisal et al., 1975).

Depression may complicate other mental illnesses such as schizophrenia, alcoholism, anxiety neurosis, senile dementia, etc. To describe the mixture a composite term has been coined, e.g. schizo-affective psychosis. They are not independent clinical conditions however. Clinical depression may also follow physical illness such as influenza or viral infection. Such a person may be characterized by low mood, difficulty in thinking, concentration and lethargy as well as loss of appetite.
Another term which is often found in the literature and is used to classify certain types of depressions are those which are called masked. These may refer to any of the following conditions: depression sine depression, depressive equivalent, depression in disguise or occult depression. Patients present themselves for complaints other than feeling depressed and these may refer to any one of the following symptoms: hypochondriasis, drug dependence or alcoholism, as well as psychosomatic disorders.

Masked depression rivals in frequency overt depressive reactions. Hypochondriasis and psychosomatic disorders are the commonest masks of depression seen in Western culture. As mentioned above, depressions may also be disguised by acting out or behavioural disturbances. Masked depression in children manifests itself generally in hyperactivity, aggressive behaviour, delinquency, hypochondriasis and also psychosomatic illness.

Though childhood depression has up till now been rarely dealt with, recent research (Malmquist, 1972) is increasingly beginning to focus on this phenomenon. This author (ibid) wrote an extensive survey on the subject and focussed on a variety of aspects such as retrospective studies, theoretical considerations, manifestations in different childhood stages, psychodynamic models, suicidal problems and biological factors. He classified depression under five headings, namely:

1. Associated with organic disease states (e.g. leukemia) secondary to a physical disease process;
2. Deprivation syndromes (e.g. anaclytic depressions starting in the second half of the first year of life);
3. Syndromes associated with difficulties in individuation;
4. Latency types;
5. Adolescent types.
Each of these categories is described exhaustively by the author and are relevant only in as far as they cast light on the etiology of depressive phenomena in adulthood in this study.

Furthermore, research has aimed for decades at attempting to subdivide depressive disorders into endogenous and reactive groups. (Eysenck, 1970) (Kendell, 1970). Up till now no research worker has succeeded convincingly in demonstrating a bimodal distribution of stress scores in a depressed population. Nor have they been able to show an inverse relationship between stress and a positive family history of depressive illness. And, also, they have not been able to obtain greater stress scores in patients labelled "reactive depression" (Thomson and Hendrie, 1972). Already in 1965, Foulds rejected the endogenous-reactive split with the opinion that the most vehement adherents of the split had to admit that evidence was almost entirely lacking. Foulds rather hoped to show in his investigations that people at one end of the continuum were very different from those at the other end of the continuum, but that stress was not the differentiating factor.

Beck (1965) also gives an overview of research regarding the endogenous-reactive dichotomy. He quotes research which investigates the role of heredity (Kiloh and Garside, 1963); constitutional factors, studies of symptomatology, physiological responses and tests, body build and response to treatment. He, too, had to conclude that the studies cited by Kiloh and Garside (ibid) lend slight support to the endogenous-reactive hypothesis and that further investigations would be required before definite conclusions could be made. Furthermore, Beck states that there are no specific signs and symptoms, apart from delusions, that distinguish psychotic from neurotic depressives. Beck's criterion was that the more severe the symptoms, the more likely the patient
would be diagnosed as psychotically depressed. He concludes by saying that "the difference between the neurotic and the psychotic depressive reaction is quantitative rather than qualitative". (ibid.) "Neurotic" is equated with "reactive".

Classification of depressive disorders distinguishes furthermore between unipolar and bipolar manic-depressive psychosis according to whether the attacks are always of one sort (mania or depression) or whether they alternate. There is still considerable uncertainty about the relationship of these two forms of mental illness.

Frank (1954) saw the depression-elevation response as constituting part of the inherent adaptive machinery available to the individual. He thought that they were employed automatically, unconsciously and directly as adaptive measures under conditions where either in actuality or in fantasy a relatively helpless individual is threatened with the loss of suitable care, protection and sustenance. He drew a parallel between the mechanism of hibernation, diurnation aestivation and other dormant states as a physiological adaptation to periodic conditions unfavourable to life. In the case of the human being, he felt that chronic depressive changes could at times protect against more acute disturbances. He also thought that hyperactivity is a less adaptive mechanism, but suggested that this pattern came into play when basic metabolic functions are being poorly maintained or are threatened. He has no data to support these hypotheses, however. It is felt that it may be equally likely that the hyperactivity of the manic serves as a defense against the anxiety which pervades the person.

Blackburn (1975), in investigating mental and psychomotor speed in depression and mania, came to the conclusion that, though manic patients solve problems quicker than depressives,
they do not differ much from normals. Also, depressives can bring their performance up to the level of manic patients when stress is put upon them to work faster. On psychomotor speed tasks, bipolar depressives were significantly slower than manics and unipolar depressives. Thus only bipolar depression does seem to decrease both mental and psychomotor speed significantly.

Involutional depression (melancholia) is a term which is outdated. A survey of systematic studies raises doubt regarding the usefulness of this category. It refers to depressive illness occurring for the first time in middle or later life and in the female is related to the menopause. Controlled studies do not support the belief that involutional depression may be distinguished from other types of psychotic depression on the basis of symptoms. There is no evidence either that hormonal changes during the climacterium are in any way responsible for depression occurring during this period.

Puerperal depression is not recognised any longer as a separate form of depression. Nonetheless postpartum depression are a regular incidence, and are very intractible as well as carrying a high risk of infanticide. Buss (1968) compares postpartum depressions with involutional depressions in that both involve a precipitating event related to change in reproductive functions. He reviews research which suggests that postpartum psychosis is no different from any other psychosis and that childbirth acts as a stress that precipitates psychosis.
Biochemistry

Evidence of biochemical disturbance may be found in three areas: (a) amine metabolism; (b) electrolyte distribution and (c) adrenal cortical activity.

With regard to amine metabolism, administration of imipramine and mono-amine oxidase inhibitors increase the activity of brain mono-amines and alleviates depression.

It has been found that lithium treatment periodic affective illness is stabilized - the increased extra-cellular sodium in depression returns to normal on recovery, since lithium affects the transport of sodium across biological membranes.

On the endocrine level small increases in hydrocortisone secretion have been found.

Studies investigating the physique of the manic depressive (Kretschmer, 1925) are no longer regarded as valid because age of subjects was not taken into consideration, amongst other factors.

Symptomatology

The chief complaint presented by depressed patients may point immediately to the diagnosis of depression or may suggest a physical disturbance. The chief complaint may take a variety of forms, e.g. an unpleasant emotional state, a changed attitude to life, somatic symptoms of a depressive nature or somatic symptoms not typical of depression (Beck, 1967).

Emotional manifestations may be anyone or all of the following and range from mild to severe:

a. dejected mood;
b. loss of gratification;
c. self-dislike;
d. loss of attachment;
e. crying spells;
f. loss of mirth response.

Cognitive manifestations include phenomena such as low self-evaluation, distortions of body image, negative expectations, self-blame, self-criticism, indecisiveness and guilt. These will be described in more detail later on.

Motivational manifestations of the depressive are regressive in nature in that the person shuns responsibility, an active role, and they seek to escape from their problems rather than trying to solve them;
1. paralysis of the will e.g. no desire to eat or to wash;
2. avoidance, escapist or withdrawal wishes, e.g. "all I want to do is to sleep";
3. suicidal wishes, e.g. "Please put me out of my misery";
4. increased dependency, e.g. "Doctor, you must help me".

Physical manifestations are considered by some to be evidence for a basic autonomic or hypothalamic disturbance that is responsible for the depressive state. The symptoms, contrary to expectations, have a relatively low correlation with each other and with clinical ratings of depression (Beck, 1967):
1. loss of appetite, e.g. the patient may have to be forced to eat;
2. sleep disturbance, e.g. the patient wakes up after 4 - 5 hours;
3. loss of libido, e.g. from slight loss to an aversion for sex;
4. fatigability, e.g. too tired to do anything.
Delusions may be grouped into categories of:

1. Worthlessness, e.g. "I am totally useless";
2. Of crime and punishment, e.g. "I am the devil";
3. Nihilistic delusions, e.g. "The world is empty";
4. Somatic delusions, e.g. "My intestines are blocked";
5. Delusions of poverty.

Hallucinations are prominent in recurrent depressive groups and as much as 25% of depressives may experience them. 13% of psychotic patients heard voices condemning them (ibid).

Clinical examination would include the appearance of the patient and signs such as sad faces and weeping but some may hide their unpleasant feelings behind a cheerful facade.

Retarded depression may be characterised by reduction of spontaneous activity which may be observed in posture and speech. In extreme cases the depressive may be in a stupor which will inhibit all action, and interfere with his thinking and affect.

On the other hand, the agitated depressive is so restless that he cannot sit still. Constructive activity is just as difficult.

It is thought that retarded patients may be passively resigned to their fate whereas agitated behaviour may represent a desperate attempt to fight the illness.

Depression and normal moods. Research data seems to support the finding that normal depression is similar in degree to mood disturbances of clinical depression but not similar in symptom patterns. Normal anxiety is characterised by a relative absence of somatic complaints and somatic anxiety (Weissman, 1975). Whether there is a continuity between normal mood or depression
will only be resolved once the etiology of depression has been elucidated.

Precipitation

According to Akisal et al. (1975), the latest A.P.A. edition relies heavily on precipitating stress as a major etiological factor in depression and makes a further subdivision of the syndrome into "neurotic" and "psychotic" symptoms, "internal conflicts" and premortid personality. The authors point out that no consensus exists on the above-mentioned clinical boundaries and add that, as it is presently formulated, there is much room for personal interpretation. In reviewing his own unpublished 5 - 15 year completed follow-up study of "neurotic depression" (ibid.), Akisal discovered that 15% remained unipolar depressives, while 10% were shown to be suffering from a bi-polar manic-depressive type illness. The authors furthermore criticise the use of personality labels such as "passive-aggressive", "emotionally unstable" and "acting out" behaviour, with the view that this only adds to confusion as far as the nosology of depressive disorders is concerned, and that years later these persons who were labelled as such were shown to be seriously psychiatrically disturbed.

When reviewing studies designed to assess the significance of stress in depression, the authors found that:

1. the association between stress and primary depressive illness is coincidental and leads to hospitalisation rather than a depressive episode;

2. primary depressive illness precedes stress (Slater and Roth, 1969):-
"In many cases the stimuli of everyday life seem sufficient to start an attack; in a few, a physical illness of endocrine changes due to childbirth and menopause can be held responsible. Psychological traumata of an emotional kind are frequently cited, but their influence is always difficult to assess".

Those who are predisposed to depression may over-react to normative stresses and therefore the precipitating events may actually represent prodromal manifestations of the illness. For instance, the person who is depressed due to loss of his job may have lost his job as a result of his depression.

3. stress does precipitate depressive illness in those who are genetically of developmentally vulnerable to such an illness.

The investigators were unable to demonstrate that precipitating stress was significantly related to depression. They suggest that criteria of depressive disorders should be free from any consideration or precipitating stress.

To conclude, the authors state that the term "reactive" and "endogenous" are used in Great Britain in a broader sense to refer to certain clinical features rather than presence or absence of stress, and in this sense only is there evidence that such a subdivision may be prognostically and therapeutically meaningful.

Their advice, is, however, that such designations are best avoided.

Arousal and depression

Whybrow and Mendels (1969), in reviewing neurophysiological studies of affective disorders, reported that depressives had a lowered threshold of arousal, disruption of REM sleep patterns and disappearance of delta sleep, the deepest stage of non-REM
sleep. They argue that such states of arousal could result from intra-neuronal sodium accumulation with consequent lowering of the resting membrane potential. Lithium carbonate may stabilize the neuronal membrane and thus correct the neurophysiological abnormalities. Alcohol causes autonomic and central arousal and may aggravate the depressive state of the individual.

Studies measuring the threshold of sleep by sedation (sodium amythral) suggest that psychotic depressives have a lower threshold than neurotics. These findings support the discontinuity position of the neurotic-psychotic dimension.

Psychological deficit in depression

Miller (1975) reports on studies investigating memory and learning deficits in neurotic and psychotic depressives. Conclusions reached were that depression interfered with the transfer of information from short-term to long-term storage, or that impairment was due to a deficit in sustaining motivation to perform well. In addition to memory deficits, depressives were found to differ in a number of areas like reduced intellectual speed, psychomotor retardation, pain perception and visual and motor perception. Deficits could not be associated with any subtype of depression but was related rather to depth of depression.
1.2) **Models of depression**

Aki sal et al. (1975) summarised research on depression and classified ten models of depression which reflected roughly five dominant schools of thought:

a. The **PSYCHOANALYTIC tradition**. K. Abraham in 1911 discussed the significance of hostility and orality in depression. According to him ungratified sexual aims bring about feelings of hatred and hostility which are projected onto an external object and which reduce the depressed person's capacity for love. He concluded that an inherited predisposition toward oral eroticism fixed the melancholic's psychosexual development at the oral stage.

In *Mourning and Melancholia* (1917) Sigmund Freud extended his writings on narcissism, a paper which he had finished in 1914. In this later paper Freud speaks of the identification of the ego with the object through introjection and regression to the oral stage or erotic development. Mourning is regularly the reaction to the loss of a loved person. In some people the same influences produce depression instead of mourning and it is suspected that they are pathologically disturbed. The lowering of self-regard which accompanies depression finds utterance in self-reproaches and can culminate in a delusional expectation of punishment. The depressive regresses from narcissistic object choice to narcissism. According to Freud,

"simple (neurotic) depression, as represented by the uncomplicated grief reaction, is of an object-libidinal origin, in distinction from the narcissistic type of depression is exemplified by the melancholic (psychotic) form which 'may extend beyond the clear case of loss by death and include those situations of being wounded, hurt,
neglected, out of favour, or disappointed, which can impart opposite feelings of love and hate'. The disappointment by the object not only incurs a high degree of ambivalent feelings, but leads finally to a withdrawal of the libido from the object and to a reinforcing cathexis of the ego". (Bibring, 1953)

Freud discusses the nature and origin of the inhibition which characterises depressive states. Inhibition is due to the "work of mourning" which absorbs all the libidinal energy and causes the person to lose interest in the outside world. This, according to Freud is also the case in psychotic depression. Inhibition is explained by the fact that the "narcissistic wound" needs an unusually strong anti-cathexis resulting in the absorption of all ego energy and as a result all functions are inhibited, including an interest in the external world.

Rado (1928) stated that the depressive has intense narcissistic needs, and a low self-esteem. When he loses his love object, the depressive reacts with anger and then by punishment of the self. This punishment is seen as an attempt to repair to win back love. According to Rado cyclic mood disorder (depression or mania) includes:

1. proneness to over-reaction and dyscontrol;
2. threat to alimentary deprivation;
3. intolerance of pain marked by a fear of pain that increases pain in a vicious circle.

Rado saw mania as an upward mood swing which was due to spurious pleasure because it was obtained by little or no effort on the part of the patient. Furthermore, he felt that such pleasure is not controlled and may therefore be likened to drugs and opiates which may at best give the patient a breathing spell.
He thought that recovery should aim at teaching the person to cope with his fear, guilt and rage, to reduce their strength and then to gradually bring initiative and sustained effort into play.

According to Beck, Gero (1936) disagreed with former writers that obsessionalism was universal in depression but concurred that depressives demonstrate an underlying narcissistic hunger, an intolerance of frustration and introjection of love objects. He also agreed that oral eroticism is the favourite fixation point in the depressive.

Melanie Klein (1934) contributed to psycho-analytic thinking with her exposition of what she called "the depressive position" in the child, that is to say, the feeling of loss, sorrow, guilt and lack of self-esteem which had its foundation in the mother-child relationship in infancy. If the child does not meet with sufficient love, feelings of helplessness and guilt over rage and sadistic fantasies overwhelm the ego. In order to handle these feelings, the infant begins to see the love object as either all good or bad.

(i) Aggression in depression

Psycho-analytic tradition views depression as the result of anger which has been turned inward on the self due to object loss.

Though most research workers have ascribed a central role to aggression in the development of depression, some have considered the depressive's resentment as a reaction to, rather than an essential element of depression (Kendell, R.E., 1970). A.S. Friedman (1970) quotes the research of Weissman et al. (1971) who found that, contrary to the prediction based on the traditional concept, that the frequency of extrapunitve
responses was significantly higher for normal college women on days when they felt depressed, compared to days when they did not feel depressed. They hypothesize that the internalisation or suppression or turning inwards of aggression is more likely to occur in those individuals who become severely or psychotically depressed. Raskin et al. (1975), in a study on symptom differences on black and white patients in the U.S.A., writes that there was a greater tendency towards negativism and the introjection of anger in blacks than in whites.

Zuckerman et al. (in Friedman, 1970) using hostility scores of the Buss-Durkee Inventory found no relationship between the degree of hostility and the degree of depression. They concluded that the pattern of the relationship of hostility to depression is not the same in individuals who become pathologically depressed, as in other individuals.

Schles et al. (1974), in a study of 37 depressed patients, explored the association between depression, hostility and the direction in which hostility is expressed. Their findings suggest that depression is primarily an emotional signal and hostility is a defense. There was a definite relationship between the degree of hostility turned inwards and severity of depression. Outward hostility was related to the presence of hysterical features and resentment.

Friedman quotes an earlier study of his in which one finding appears possibly to support the classic hypothesis, and that is the response to the question "Is it ever right to become angry?" Depressives gave an unqualified "yes" significantly less often than control subjects, suggesting a problem with the acceptance of or the expression of anger during depression. It does not tell us how much anger depressives actually experience or express.
Again, Friedman (ibid.) found in another study of his that depressives rated themselves on the Clyde Mood scale to be more "bitter", "frustrated" and "sulky" than normal controls but not to differ on traits as "rebellious", "rude", "violent" and "furious".

Klerman et al. (1970) claim that redirection of hostility has not been correlated with clinical improvement.

Pilowski and Spence (1975) found that the greater the anger score, the more the patient was likely not to be psychotically depressed. He thought that the value of expressing anger in adult depression was quite poor, since it could exacerbate losses and frustrations rather than resolve them.

Weissman et al. (1971) also found that depressed women showed more hostility to those they have a close relationship with, for example the spouse or the children, than towards other people. The authors suggest that mobilization of anger outwards might be disastrous to relationships which were already tenuous.

Thus, it seems from the above that there is little concensus on the relation of aggression to depression or whether aggression is primary of secondary to the problem of depression. Moreover, there is no agreement as yet whether aggression is innate or merely a reaction to frustration.

a (11) Depression and suicide

In a later paper Weissman (1973) attempted to predict which depressives attempt suicides and which do not. She suggested that angry, complaining, hostile behaviour in a depressed patient may be indicative that he is at risk for a suicidal attempt. Furthermore, suicide attempters were likely to alienate staff and family due to hostile, frustrating and maladaptive interpersonal relations. As their defenses fail, symptom formation generally spills over into acting out.
Silver et al. (1971), in a study of 45 patients who had attempted suicide, found that 80% scored in the depressed range of the Beck Depression Inventory. Also, a significant correlation between depth of depression and the degree of suicidal intent was found. Nor did this correlation seem to be a function of age.

Lester (1968) examined the manipulative aspects of suicidal behaviour. Suicide is seen by him as an attempt to get love and attention and the act itself as one of revenge. He also suggested that the suicidal individual might be seeking rejection, which would serve to confirm his opinion of the world as an unfriendly and unjust place and would also confirm his opinion of his own worthlessness. Lester discusses Kelly's ideas on hostility and aggression and interprets the behaviour of the suicidal individual as hostile. This is considered to be more in accord with clinical and experimental literature than the psychoanalytic view of suicide as inward directed aggression, though the two are not necessarily mutually exclusive.

In a later study, Lester (1969) suggests that suicidal individuals show greater dependence on those whom they resent than non-suicidal individuals.

Lesse (1974), in his book on Masked depression writes that at one of the American suicide prevention centres, the presence of somatic aspects of depression combined with denial of the affective component of depression is a predictor of high suicide potential.

In a study of adolescent suicide attempts, Barter et al. (1968) came to the conclusion that suicidal behaviour in adolescents appears to be a culmination of progressive family
disorganisation and social maladjustment. Those adolescents who are unable to achieve adequate family relationships or who have sustained parental loss or who have a minimal social life, have a significantly higher rate of suicidal behaviour.

From the above, it seems that depression and suicide are related. Some of the psychodynamic factors, such as hostility, rejection and dependency are discussed as well as etiological factors. Interpretation of suicidal gestures vary from author to author, depending on what school of thought they adhere to.

b. The EGO psychological approaches view depression as stemming directly from feelings of helplessness, lowered self-esteem (Bibring, 1965) and negative cognitive set (Beck, 1967).

Bibring (1953) differed from the psycho-analytic school in that he saw depressive illness as being essentially an affective disorder of the ego with loss of self-esteem as a primary feature of this illness. Negative experiences in the first years of life probably predispose the individual to depression in later years, he thought. In addition to loss of self-esteem due to lack of love and affection, other needs and goals which were frustrated could also lead to a lowering of self regard. According to Bibring, all depressive reactions have something in common, even though they manifest themselves in different ways.

"they (the depressions) seem to present a basic pattern which they have in common. In all these instances, the individuals either felt helplessly [underlining mine] exposed to superior powers, fatal organic disease, or recurrent neurosis, or to the seemingly inescapable fate of being lonely, isolated, or unloved, or unavoidably confronted with the apparent evidence of being weak, inferior or a failure.
In all these instances, the depression accompanied a feeling of being doomed, irrespective of what the conscious or unconscious background of this feeling might have been; in all of them a blow was dealt to the person's self-esteem, on what grounds such self-esteem may have been founded". (Bibring, 1953).

Bibring furthermore viewed depression as stemming from conflict or tension within the ego itself rather than conflict between the ego and super-ego. As a result of not being able to solve conflicts the ego becomes aware of its helplessness. Awareness of its goal and at the same time awareness of its helplessness to attain its goal leads to a depressive reaction with resultant collapse in self-esteem. Wishes which cannot be attained by the ego remain, i.e. the desire for love and security.

"Irrespective of their unconscious implications, one may roughly distinguish between three groups of such persisting aspirations of the person:

(1) the wish to be worthy, to be loved, to be appreciated, not to be inferior or unworthy;

(2) the wish to be strong, superior, great, secure, not to be weak and insecure; and

(3) the wish to be good, to be loving, not to be aggressive, hateful and destructive.

It is exactly the tension between these highly charged narcissistic aspirations on the one hand and the ego's acute awareness of its (real and imaginary) helplessness and incapacity to live up to them on the other hand, that depression results". (Bibring, 1953).

Thus the most important feature of Bibring's theory is that depression is an "ego state" as well as a mood state which is
independent from the aggressive drive.

"the basic mechanisms of the resulting depression appears to be essentially the same. According to this view, depression is primarily not determined by a conflict between the ego on the one hand and the id, or the superego, or the environment on the other hand, but stems primarily from the tension within the ego itself, from an inner-systemic conflict". (Bibring, 1953).

According to him, hostility arises when needs are frustrated and self-esteem becomes lowered. Bibring goes on to compare depression with similar affective states, e.g. depersonalisation and boredom. To Bibring, they are phenomenologically related, to such an extent that he feels that patients sometimes find it difficult to keep them apart:

"Clinical observations show that depersonalisation often develops in place of an acute outburst of anger, and for that reason it has been classified as a "defense mechanism", though it is difficult to define the actual process" (ibid.)

According to the author, the dynamic conditions of boredom are also due to a state of mental inhibition. He explains this is an inability on the part of the ego to stimulate mental activity, which is the result of the repression of instinctual aims. Thus:

"The (unconscious) goals are maintained in depression as well as in boredom, but the ability to reach them is interfered with in boredom by the repression of the true goals and the rejection of substitutes because they are either inadequate or prohibited". (ibid.)

Bibring ends his paper by discussing the following five points:
"(1) depression represents a basic reaction to situations of narcissistic frustration which to prevent appears to be beyond the power of the ego, just as anxiety represents a basic reaction of the ego to situations of danger ...."

"(2) In general, one may say that everything that lowers or paralyzes the ego's self-esteem without changing the narcissistically important aims represents a condition of depression...."

"(3) The same conditions which bring about depression, in reverse serve frequently the restitution from depression".

By this Bibring means that narcissistically important goals appear to be again within reach, or that the goals are modified, or altogether relinquished or the ego has regained its self-esteem with the help of recovery mechanisms or a defense is used against the affect of depression as such (either apathy or hypomania).

"(4) The most frequent complication of the basic structure of depression can be found in the large group of orally dependent people who thrive on "oral narcissistic supplies" and collapse when these are lacking, or who in reaction to severe frustration regress to oral mechanisms consisting in the "incorporation" of the objects in cases of severely ambivalent attitudes toward it". (ibid.)

With regard to hostile impulses, Bibring explains that on recovering from depression through a regaining of self-esteem, aggressive impulses are released and directed against the object world. He supports his views by giving examples of the fantasies of patients, for instance, the patient who on her way to recovery saw herself as "cutting of the heads of the people passing by". Lastly,
"(5) It is hardly necessary to discuss the conscious and unconscious secondary gains which many patients derive from a depression" (ibid.)

Bibring says that these gains may be both intrapsychically as well as derived from external "narcissistic supplies". On the other hand, the depression may be used as a justification for aggressive impulses towards external objects.

Beck, A. (1970) attempted to deal with intrapsychic phenomena through the use of dreams, free associations and fantasies in order to arrive at an understanding of depression. He found that depressives show less hostility in dreams than non-depressives. But he also found that in the dreams of depressives the dreamer is the loser in that there is invariably a negative outcome for the dreamer, i.e. the depressive dreams that he is inferior, that he is inadequate, etc. Beck calls this the "born loser" syndrome and gives this phenomenon the term "masochistic dreams" which, from the psycho-analytic point of view may be seen as introverted hostility which causes the dreamer to suffer and have the need to suffer. However, the Freudian psychoanalytic interpretation that masochistic dreams are a wish fulfilment is rejected by Beck for a more parsimonious hypothesis whereby the dreamer sees himself as the loser, whether he is waking or dreaming. According to the author, the depressive has a negative view of 1. the world, 2. himself and 3. the future. This triad plus the theme of loss permeate the cognitive distortions of depressives. As a plan of management Beck suggests that the therapist should get the patient to see himself as the winner. His treatment programme seems somewhat naive.

Under cognitive distortions the author includes self-esteem which has been lowered to a mild or severe degree. The person, for example, imagines that he is the world's worst sinner or that
he is totally penniless or totally inadequate. Generally attempts
to correct these ideas are of no avail.

Secondly, **negative expectations** are closely related to the
feelings of hopelessness. At its most severe the future seems
to be black and hopeless. The patient feels that he will never
get better, or that nothing can change for him.

Thirdly, **self-blame** and **self-criticism** are somehow related to
the depressive's notions of causality. In a severe state the
depressive may believe that he is responsible for all the violence
and the suffering in the world.

Fourthly, the person's **indecisiveness** is a serious handicap,
both in the cognitive and in the motivational sphere. Thus the
patient not only anticipates making a wrong decision but in
addition he experiences a paralysis of the will. In severe cases
patients have severe doubts about everything they do and say.

Lastly, there is also **distortion of body image** which may
range from thoughts about getting fat or having plain looks to
beliefs that the patient is ugly or repulsive looking.

Though Beck explains that idiosyncratic cognitive patterns
become activated by specific stresses impinging on earlier traumas
or by overwhelming non-specific stresses, he has not fully ex-
plained how these faulty cognitive patterns are formed.

He attempts to elucidate this only partly by means of Freud's
theory of retroflexed hostility as being the origin of negative
self-concept, self-criticism and suicidal wishes.

Serban (1974) explores the neurotic conflict on a cognitive
level more fully than Beck. He thought that cognitive distortions
resulted from a selective faulty system of reasoning based on
magical convictions and beliefs. Furthermore, he is of the opinion
that the roots of neurotic thinking are traced back to childhood
days when judgement is magical and self-centered.

Beck started a systematic study of the dreams of patients with a view to finding out whether dreams of neurotic depressed patients in psychotherapy showed a greater incidence of manifest dreams with "masochistic" content than the series of dreams in a matched group of non-depressed patients. He had noted that the dreams of neurotically depressed patients contained a greater number of unpleasant events which were mostly painful; feelings of being rejected, thwarted, deprived or punished. The effective state was generally found to be one of sadness, loneliness or frustration. The results of his investigation showed a significant difference between the depressed group and the control group. On the basis of this study of the dreams of 218 patients (Beck, A. 1967) the notion that depressed patients show a greater incidence of dreams with masochistic content appeared to be confirmed.

c. The BEHAVIOURISTS conceive of depression as a set of maladaptive behavioural responses resulting from uncontrollable aversive stimuli or a lack of reinforcement (Burgess, E.P., 1969).

Levinsohn (in Calhoun, 1974) gives us an outline of the major assumptions of the behavioural theory of depression:
1. a low rate of response - contingent positive reinforcement (rescorpose) acts as an eliciting (unconditioned) stimulus for some depressive behaviours, e.g. dysphoria, fatigue, etc.;
2. the patient is on an extinction schedule (a process whereby responses are extinguished);
3. the amount of rescorpose is a function of:
   a. the number of reinforcing events, and
   b. the availability of reinforcement in the environment;
4. that it is the behaviour and skills which the patient omits which will elicit reinforcement. Furthermore:
   a. the amount of rescomposition is less for depressives than normals;
   b. the onset of depression results in a reduction of rescomposition;
   c. the intensity of depression must vary with the amount of rescomposition;
   d. improvement results in an increase of rescomposition.

Lewinsohn (ibid.) also explains the behavioural viewpoint of other aspects of depression, such as a low self-esteem, pessimism, guilt, etc. He suggests that the therapist should work on cognitive relabelling, so that instead of saying "I am worthless" the patient will begin to say "I lack something". He does not quote success rates.

As far as the relationship between hostility and depression is concerned, behaviour therapists are of the opinion that aggression is elicited because of the low rate of rescomposition which the patient has been receiving. When the depressive expresses his hostility, he alienates and isolates the people around him and as a result he has learnt to avoid expressing his hostility.

Regarding the precipitating factors in the occurrence of depression, Paykel et al. (in Lewinsohn, ibid.) suggest that generally depression begins after certain environmental events. However, it is also possible that depression may occur following "success". If one were to investigate carefully the meaning of this "success" it may become apparent that sometimes "success" may involve a reduction in the amount of social reinforcement obtained, e.g., a person's goal may be to attain a Ph.D. Once he has obtained it, the individual may become depressed because he no longer has a goal to strive for.
The behaviourist theory predicts a lower rate of positive reinforcement for depressed patients than normals. It has been stated that depressive patients will elicit fewer behaviours from other people than do non-depressives. Lewinsohn reports that he found a significant association between the mood of the subject and the number of pleasant activities which the person engaged in, with the administration of a Pleasant Events schedule and a Depression Adjective Checklist each day. In another study of his (ibid.) depressives were found to have lower activity scores. They rated fewer items as pleasant and had a lower net obtained reinforcement value than either of the control groups. Depressives were also found to be more sensitive to aversive stimuli in that they dislike negative stimuli more than the control subjects.

When comparing psychopaths with a depressed group, the two groups were found to be at opposite ends of the autonomic response continuum, with the depressive group being more responsive to aversive stimuli. The author suggests that desensitization to aversive stimuli may be therapeutically useful with depressives (ibid.).

Research on the relationship between social skills and depression reveals that low mood states further reduces a person's social skills. By social skills is meant the ability to emit behaviour which is positively reinforced by others (Paykel et al., 1971). Lack of social skills will therefore produce a low rate of reinforcement. Research in group therapy and home investigations has focussed on interpersonal behaviour and it was found that depressives emit about half the amount of behaviours than normals. The depressive's timing of social responses was also found to be deviant, being less predictable and homogeneous than controls. In an experiment
in which subjects had to talk to each other via teletypewriters, the output was less for depressives than for normals. In short, interpersonal inefficiency was deficient in that the relationship of depressives was less reciprocal, the interpersonal range restricted, less positive reactions were used and the action latency reflected a ratio of three to one for depressives and non-depressives (Libet et al., 1973).

Treatment strategies have aimed at increasing the activity level of the depressive. The Premack principle is utilised whereby low frequency behaviours are reinforced by using high frequency behaviours or again by the use of assertive training, social skills training and desensitization to avoid situations which might otherwise be rewarding (Lewinsohn et al., 1968).

Seligman et al. (1967) accidentally discovered a phenomenon which they termed "learned helplessness" and which involved administering inescapable electrical shock to dogs. They found that exposure to a number of sessions of inescapable aversive stimuli impaired the animal's adaptive responses to future situations where an escape from aversive stimuli was readily available. The dog seemed to "give up" as it were, in that it passively accepted the highly traumatic shock experience. Similarities between learned helplessness in dogs and depression as described by Bibring are striking. On the basis of his experiments Seligman suggested that the depression-prone individual has a life long history characterised by relative failure in exercising control over the reinforcers in his environment and he is consequently paralysed by helplessness and the inability to assert himself. Contrary to most studies, the authors discovered a lack of aggression and they interpreted this to be a symptom which was derived from feelings of helplessness.
McKinney et al. (1969) argue for an experimental animal model of depression wherein they reviewed evidence from a variety of fields which pointed to the feasibility of such a model. They described evidence for animal depression by means of separation experiments of Harlow et al. (1957) who separated rhesus monkeys from their mothers for a three-week period. These same authors also completed a number of separation studies at six months of age. The infants showed behavioural changes including severe appetite and sleep disturbance. Kaufman and Rosenblum (1976) studied the reaction of pigtail monkeys and found changes reminiscent of anaclitic depression as described by Spitz in infants separated during the second half of the first year of life.

Lorenz, K. (1952) described the symptoms of what he called "acute grief" in a goose who, after normal development was suddenly separated from its family.

In addition to separation phenomena, McKinney et al. (1969) also proposed another kind of model based on the importance of dominance in the relationships of many non-human primates. Price, J., (1967) postulated that the behaviour which occurs when the animal goes up the hierarchical and social system as resembling that of elation. Change in status related to going down may be seen as a form of "depression". The author postulated this depression to be adaptive since it prevented the descending animal from fighting back.

Also, it was found that depression could be induced by sensory deprivation or social isolation or both. Harlow et al. (1955) found that sufficiently severe and enduring early isolation in animals reduced the animal to a social-emotional level in which the primary social responsiveness is fear.
McKinney suggested that the creation of an animal model of depression could provide a system in which a variety of treatment techniques could be evaluated such as ECT (electrical shock treatment), drugs and social and environmental changes. The authors recognise the limitations of animal experimentation but nonetheless suggest that a comparative approach might provide a system for investigation of concepts which can be tested on an observational and experimental level, at least in animals.

A.A. Lazarus (1968) enumerated operational factors based on a S-R analysis which can account for depression, and more important, can designate implications for treatment. Basically, he viewed depression as a state of being in which the subject's response frequency or quality diminished as a function of reduced reinforcement. He also suggested that reinforcing consequences maintain depressive behaviours. Concurrent with extinction of active task-orientated behaviours may be the conditioned acquisition of depressive behaviours for secondary gains.

Burgess (1868) proposed a general plan of treatment in order to modify depressive behaviours. She suggested that the reinforcers be reinstated and that tasks be completed if depression were to be treated successfully. She does not mention data to support this.

Joseph Wolpe (1971) suggested that depression may either result from a particular biologic state of affairs or be based on learning. Reactive depression is usually found together with other unadaptive responses - especially anxiety. He admits that behavioural treatment methods are limited.

Separation in humans

In the psychoanalytic framework hostility is unleashed as a result of object loss.
(Harlow, 1965) have shown how disruption of a significant attachment bond may be most traumatic in primates and it is suggested that this may also be the case in the human being. Many studies were designed to test the hypothesis that bereavement during childhood or other kinds of early object losses may be predisposing factors for the occurrence of adult depression.

Rene Spitz (1954) reported that infants separated from their mothers in the second half of the first year led to rapid increase in the death rate of these children. Already after one month of maternal deprivation, a retardation in development took place in most areas, such as mastery of perception, body mastery, learning, manipulation of objects and intelligence. It was noticed in the foundling home that autoerotic activities, e.g. thumbsucking, etc., were practically non-existent.

Similarly, children's reactions to the death of a parent is described by Keeler (1954). The most common symptom was a profound euphoria in the child but by the use of projective techniques a deep underlying depression could be detected. The second most common symptom was denial that the parent was dead. Some believed in the resurrection of the dead parent. Furthermore, delinquent behaviour is also a reaction to frustration and deprivation and even suicide attempts and pre-occupations are not altogether unknown.

Jacobson et al. (1975) assessed 347 depressed inpatient women and 114 outpatient women and compared them to 198 normal women with regard to depriving childrearing experiences. The findings suggest no association of adult depression with overt childhood loss events, but did provide an association of depriving childrearing processes with adult depression.
Their findings also revealed evidence of a relationship between the degree of depriving childrearing experience with the severity of the adult illness.

Sims (1975), in a follow-up study of 146 patients with a diagnosis of neurosis, found that predictive of poor outcome of treatment were unsatisfactory marital and sexual relationships, poor material management, unsatisfactory social state and unsatisfactory early environment. Prognosis was worse when the patient described a disturbed relationship between his parents during his childhood or an unhappy childhood.

Other authors have attempted to relate different forms of childhood bereavement to adult depression as well as other kinds of psychiatric disorders. The results of such investigations have often been conflicting and difficult to compare because of differences in methodology.

d. The EXISTENTIALIST views depression as resulting from experience of loss of meaning and no purpose in life. Berger, E. (1964) criticised the theories of orality and aggression as being outmoded as "the hydraulic tank model" and he agreed with Bibring that loss of self-esteem is the primary focus of depression. The author conceives of depression as principally an ego-phenomenon and only secondarily as a consequence of self-directed aggression. Since the ego is rooted in social reality and since self-esteem is composed of social symbols and social motives, depression becomes a direct function of the cognitively apprehended world. The author agrees with Szasz (1961) who suggests that in this cognitive world the depressive thinks he has lost the "game" of life, that is, he cannot perform a series
of rules and norms for significant action. This is in fact a broadening out of the traditional object-loss theory. According to the author, people "create" objects by acting according to the social rules. They create themselves as they create objects. To lose an object is to lose someone to whom one has made an appeal for self-validation. To lose a game is to lose a performance in which identity is sustained. Unless the person has the sentiment that he was an object of primary value in a world of meaning, that he has self-value and feels worthwhile, life grinds to a halt. Berger also suggests that the rise and fall of cultures follow a similar pattern.

Bellak et al. (1971) write that depressed patients test reality sharply, especially philosophical issues. They suffer from the absence of what he calls "vital delusions". According to him depressives do not believe in unlimited possibilities, in immortality nor in free will. "They are unencumbered by the good object relations that keep the rest of us more felicitously deluded".

e. The BIOLOGICAL school views depression as "the behavioural output of a genetically vulnerable central nervous system depleted from biogenic amines and characterized by hyper-arousal" (Whybrow, 1969). Thus the main line of biological approach to the etiological basis for depression has been the genetic approach. Already in 1936 Slater proposed the major gene hypothesis as a single autosomal dominant gene with reduced penetrance which could have one-third of carriers affected.

Friedman (1975) studied the interaction of drug therapy with marital therapy in depressive patients and found that drug
therapy was faster and generally superior in symptom relief and clinical improvement. Also for reducing hostility and enhancing the perception of marital relationships, drug therapy had a better earlier effect, but marital therapy had superior effects by the end of treatment.

Vogel et al. (1975) studied REM sleep reduction and its effects on depression. Results suggest that REM sleep reduction has antidepressant activity and that antidepressant drugs (imipramine) alleviate depression because of their capacity to reduce REM sleep. Van den Burg et al. (1975) found that depressives were generally rated as improved after sleep deprivation but again after subsequent sleep relapse followed as a rule.

Wittenborn et al. (1975), in comparing antidepressant medication in neurotic and psychotic patients, found that results did not show any of the treatments preferable for neurotic or psychotic patients. These results support the view that neurotic and psychotic depression is on a continuum rather than two separate entities.

More recently pharmacogenetics have been investigated as a diagnostic tool in facilitating the reversal of deficits in the diencephalon. Pare et al. (in Akisal, 1975) have described tri-cyclic responsive families on the one hand and monoamine oxidase (MAO) inhibitor responsive families on the other hand. The group of patients who respond to MAO inhibitors are labelled as atypical depressions with hysteroid personalities.

Furthermore, Akisal et al. attempted to list research contributions that support the classification of affective disorders into bi-polar (manic-depressive), unipolar and primary depression. They also attempted to take into consideration
differences in family history, prognosis, biochemistry, neurophysiology and response to drugs. The authors hopefully conclude that pharmacological criteria may ultimately prove to be sensitive discriminators in the classification of psychotic disorders. They postulate that genetic factors determine such differential responses to pharmacotherapy.

Research investigating the effects of heredity and rearing on the development of psychopathological disorder in the child suggests that rearing patterns have only a modest influence on individuals who harbour a genetic background but an appreciable effect on persons without such a background. Though this study investigates schizophrenia, the theory of noxious family influences which Rosenthal (1975) proposes also applies to depression in all likelihood. Failure to learn skills such as 1. socialization, 2. cognitive integration, 3. containing anxiety, all this will lead to psychological disintegration. Rosenthal quotes Spitz's account of some institutionally reared babies as an example of failure in socialization.

Recent research work seems to point to the manic-depressive depressive syndrome as being on a continuum rather than as a polar opposite. Beck (1967) writes that there is no conclusive evidence that the two conditions are opposite in their biological substrates. Kohn and Clausen (1955) studied the pre-morbid personality of manic-depressives and found that they were as likely as schizophrenics to have been socially isolated in early adolescence. Furthermore they were most likely not to be extraverted in their younger years either. This is contrary to what is generally believed.

"Despite impressive advances in research and therapy, our
theories of clinical depression remain rooted in the 19th century concepts derived from experience with hospitalised and psychotic patients. Unresolved problems include: the role of life experience in depression, delineation of psychopathological states from normal emotional reactions, classification and differentiation of types of depression, the need for better predictors of treatment responses, and social and clinical criteria for outcome studies". (Klerman, 1971).
1.3) AN EVALUATION OF EACH OF THE MODELS OF DEPRESSION

a. The Psychoanalytic school

With regard to the psycho-analytic school of orality, later writers have criticised Abraham's and Freud's views as being an "antiquated hydraulic model" of the mind and the emotions. They questioned whether the origin of depression was always a fixation at the oral level and point to their clinical work as evidence that there may be different origins for depression. Furthermore, these later writers (e.g., Bibring) suggest that the depressive has different goals which may be external to himself rather than the one goal of gratification on an oral level alone as suggested by the psycho-analytic school.

As far as the psychoanalytic view of hostility is concerned, one of the main problems seems to be that this model does not lend itself easily to empirical verification or prediction. Numerous questions arise which seem to be incompatible with the aggression turned inwards model. For instance, the redirection of anger outwards has proved to be harmful to the depressive's social relationships thus leading him into a deeper depression. Research on the correlation between hostility and suicide has lead research workers to believe tentatively that hostility and depression are separate affects which sheds doubt on the aggression turned inward model as an adequate hypothesis for depression.

In spite of the above criticism, the Freudian model of aggression has not been superceded by a more comprehensive and more easily verifyable conceptualisation of depression which is universally acceptable. In the last decade, many research workers have continued to interpret data obtained in the light of psychoanalytic thinking or have not given adequate alternative ways of interpretation.
Thus it is felt that, with regard to the question of aggression, the psychoanalytic model will be partially included in the present study. The direction, and amount of general hostility will be investigated with the aim of clarifying whether the data obtained can be explained in psychodynamic terms alone or whether the data can be interpreted more easily in the framework of another model.

b. The ego-psychologists

Bibring's model views depression primarily as an ego state. Greater attention is paid to object loss and its consequences on the ego than in the psycho-analytic model. Bibring was the first to have made a major conceptual break away from the id-psychological approach to depression and much recent work has supported his position. To Bibring hostility is an "inconstant secondary phenomenon resulting from object loss or objects preventing the attainment of cherished aspirations" (Bibring 1953).

The fact that his ideas are easily amenable to research and are closely linked to the animal studies of the behaviourist school regarding depression are its main advantages. Moreover, he gave an adequate explanation of the etiology of depression.

Beck's view of depression relies on an altered style of cognition characterised by negative expectations on the basis of depressive mood states. However, Beck does not attempt to explain WHAT triggers the activation of idiosyncratic cognitive patterns. Cognition is diverted into specific channels which deviate from reality in the form of negative judgements and misinterpretations. He thus partially explains how he arrives at
his theory of hopelessness in that misinterpretations lead to depression and hopelessness just as do reality-based expectations.

On the basis of the above, Beck has provided a rationale for a unique therapeutic approach to depression by focusing on altering the negative cognitive set. It is presumed that, as a result of therapeutic intervention, the symptoms and behaviours characteristic of depression will be eliminated.

Even though lowered self-esteem as well as cognitive set cannot be tested in animals, nonetheless it is felt that Bibring's and Beck's models of helplessness and hopelessness are sufficiently connected so that both models lend themselves to experimental verification. These models also lend themselves most easily to prediction of outcome of patterns of behaviour and have already stimulated much research.

c. The Behaviourist school

This school has made valuable contributions to research on depression with the discoveries:

a. that depressives are behaviourally on an extinction schedule; and

b. the creation of an animal model of depression (the work of Seligman). His experiments with dogs produced a behavioural condition which he termed "learned helplessness". This concept provides many parallels to human depression.

Even though Seligman's model cannot totally encompass the cognitive models, similarities between learned helplessness and Bibring's model (and to a lesser extent Beck's model) are striking.
Clinical evidence has suggested that various behavioural techniques can ameliorate depressive states. An advantage of the behavioural over psychoanalytic formulations is that the former can be effectively operationalised for experimental verification. The use of objective observation is the method of preference of the behaviourists.

However, a disadvantage of the behaviourist model is that is cannot explore complicated cognitive aspects of the ego-psychological as well as the existentialist models of depression. A further drawback is that, once the depressive phase becomes biologically autonomous, therapeutic intervention along behaviourist lines is no longer possible.

The behaviourist model of depression will not be used in this study, for the behavioural techniques are best investigated in a laboratory set up with animals as subjects, or in elements of human behaviour which are within a very limited scope.

"Holists feel that this theory is the very essence of a segmental, fragmented and atomistic approach to behaviour".

(Hall and Lindzey, 1957).

The behavioural model will not lend itself easily to an investigation of the variables in this study which deal with negative cognitive set.

d. The Existentialist model of depression

Existentialists have added to our insight of depression by emphasizing the human being's purpose of existence in order to survive in society. Already in the 1950's American psychologists found that psychology had become straightjacketed by behaviourism, and had lost sight of the person and his values. Existentialism may be seen as a protest against critical empiricism and scientific materialism.
The existentialists use "as a basic unitary concept for the understanding of all human life the awareness of the individual of himself in his world, "Being-in-the-world"; from this are to be derived the concept of "ontology", the doctrine of being and the basis of all philosophy" (Slater and Roth, 1960).

Thus, by focussing on subjective experience, the existentialist school may be viewed as being diametrically opposed to behaviourism. In contrast to psychoanalysis, existentialism is concerned with the Ego and higher human motifs while "neglecting early childhood experiences, instinctual drives and all that we share with the animals" (ibid.)

Positive contributions of existentialist writers were their deep concern with attempts to discover the identity of the individual. They held that man is basically free, but that recognition of freedom can be a source of anxiety. According to Hall and Lindzey (1953), existentialism had an almost immediate impact on the thinking and practices of numerous psychologists and has been one of the chief influences in bringing about the emergence of viewpoints and techniques, "especially in the area of counselling and therapy" but not research.

However, the tendency to favour "understanding" depression over objective description of observable signs and symptoms may be a disadvantage in clinical research. Existentialists themselves are aware that their contributions are in the field of psycho-therapy rather than research. For this reason the existentialist model of depression will not be focussed on in this study.

e. **The biological school**

The biologists have contributed to our knowledge of depression
by proposing a causal relationship between a chemical event in the brain and a set of observable behaviours or subjective experiences, (e.g. investigations into the REM sleep of depressives, pharmacological agents, genetic studies, etc). However, the notion of a direct one-to-one relationship between a chemical event in the brain and a behavioural syndrome has been discarded in most areas of neurobiology as "reductionist thinking". If an underlying defect in biogenic amine metabolism does exist, the biologists propose that these alterations can maintain depressive behaviours and are secondary to developmental and interpersonal events.

"The facts of conscious experience are irreducible and must enter in their own right as basic irreducible elements, into any comprehensive account of the mind". (Smythies, 1973).

The pharmacological and genetic approaches have been excluded from this study, as well as the study of biochemical alterations of the central nervous system because, even though they contribute greatly to our understanding of the depressive syndrome, they are not strictly the field of clinical psychology.
1.4) **GENERAL AIMS OF THE PRESENT STUDY**

It is proposed to focus on two models of depression, primarily on Bibring's theory of helplessness and, to a lesser degree, on the psycho-analytic model of aggression turned inwards.

With the above-mentioned models in mind this study aims at investigating how perception of family feelings relate to depression. Within the framework of Bibring's model it is hoped to elucidate how an excessive degree of negative feelings by one or both parents will lead to helplessness later on in adult life. It is felt that an excessive amount of negative feelings will serve as negative reinforcement which will lead to a lack of self-esteem, which will again in its turn lead to helplessness in later years. On the other hand, an excessive amount of positive feelings on the part of the parents can also be expected to lead to helplessness since the child presumably never learns to separate from the indulgent or over-protective parent, with a resultant lack of autonomous behaviour and a lack of ego strength in later years.

Further, keeping Bibring's model in mind, this study aims at investigating whether depressives will tend to see reinforcement as independent of their behaviour, or not. Since depression is seen as tantamount to helplessness and the idea that there is nothing which can be done to bring about a change in the present situation, it will follow that depressives will feel that they are unable to exert control over their lives and over their destiny.

Within the psycho-analytic framework, it is hoped to gather information regarding the direction as well as the amount of hostility. The direction of hostility inwards would validate
the psycho-analytic model of aggression, whereas a lack of aggression or an excessive amount of aggression, regardless of direction, would be evidence supportive of Bibring's model of helplessness. Excessive hostility might be interpreted as the agitated depressive's attempts to fight the feelings of helplessness and depression, whereas a total lack of aggression may be seen as a giving in to the feelings of despair through a state of retardation which is often experienced in severe states of depression.
Hypothesis 1
Depressives will show significantly more general hostility than normals or recovered depressives.

The rationale for this derives from Foulds who proposed that general punitiveness was a reliable indicator of disturbance. By punitiveness he meant aggressive or hostile impulses directed either inwards in the form of guilt or self-criticism or directed outwards in the form of blame and criticism of others. Since Foulds saw depression as one of the manifestations of disturbance, it follows that the more disturbed (depressed) a person is likely to be, the more hostile that person is likely to be.

Hypothesis 2
Depressives will tend to show significantly more inward hostility than normals.

The rationale for this derives both from Freud's and Bibring's models of hostility, namely that of retroflexed anger as a result of object loss. This hypothesis rests on the assumption that in childhood the depressive was not permitted to show anger toward significant others, especially parental figures. Thus, together with consequent loss of self-esteem, the anger becomes turned inwards on the self.

Hypothesis 3
Subject who are depressed will tend to differ from normals on perceived locus of control, in the direction of significantly less internal control.

The rationale for this derives from the assumption that, according to Rotter's learning theory, there will be far more
invalidating experiences in the childhood of the depressive (in the form of excessive warmth or undeserved punishment) than the non-depressive. Consequently the depressive will not be able to perceive reinforcement as contingent upon his own behaviour.

Hypothesis 4

Subjects who perceive an excessive amount of negative feelings in the form of criticism or rejection between their parents and themselves in childhood will tend to be significantly more depressed than subjects who perceive their parents as reasonable in their punishment, or warm and affectionate.

The rationale for this derives from the assumption that excessive negative reinforcement will lead to the experience of a lack of self-worth. Within Bibring's model of helplessness, lack of self-worth & inferiority feelings could be construed as leading to a consequent lack of autonomy.

Hypothesis 5

Subjects who perceive an excessive amount of positive feelings from and towards their parents in childhood will tend to be significantly more depressed than subjects who perceive their parents as less extreme in their affection.

This is hypothesized as a result of the assumption that an excessive amount of positive feelings in the life of a child will discourage the child from separating emotionally from the parents. Consequently, within Bibring's model of helplessness the child will grow up not having learnt autonomous behaviour.
Hypothesis 6

It is hypothesized that subjects who have recovered from a depressive illness will not differ significantly in the way they perceive their family relations from subjects suffering from a depressive illness.

The rationale for this derives from the assumption that patterns of family relations in childhood will be the same for depressives and for recovered depressives.
CHAPTER II

METHOD

2.1. Design

Ten clinically diagnosed depressives with a high score on the Beck Depression Inventory, ten recovered depressives attending the out-patients department of the hospital and ten roughly matched controls will be assessed on the following measures :-
1. The Beck Depression Inventory (D.I.)
2. The Family Relations Test (FRT)
3. The Hostility Direction of Hostility Questionnaire (HDHQ)
4. The Rotter Internal-External Control Scale. (Rotter)

The major variables investigated will be positive and negative feelings towards both mother and father, as well as from mother and father as related to depth of depression.

Further variables investigated will be maternal over-protection, paternal over-indulgence and maternal over-indulgence, the internal-external control variable, as well as the amount of hostility and direction of hostility as related to depression.

2.2. Techniques of assessment

2.2.1. The Beck Depression Inventory

a. The test

The above inventory will be used to measure depression because it is felt that this test is the most satisfactory scale available
for the following reasons. Beck intended it to approximate clinical judgement of the intensity of the patient's depression. The author claims several advantages, namely that its form provides a standardized, consistent measure in that it asks each subject the same questions in precisely the same way. Furthermore, the test can be administered by a trained interviewer, which is far more economical than a psychiatric assessment.

The authors sought to maximize differences between a depressed and a non-depressed population. They hypothesized that, as severity of depression increases, so also the number of symptoms increases. In addition, they linked severity of symptoms with severity of depression. The patient's total score is therefore a combination of the number of symptoms and the severity of the particular symptoms.

Regarding the rationale for the inventory, Beck constructed it on the basis of his observations of psychotherapy with depressed patients. He selected 21 categories of symptoms and attitudes that appeared to be specific for depressives. Each facet is described in terms of the behavioural manifestations of depression. The subject is asked to rate himself on a graded series of statements reflecting the range of severity of the symptoms from zero to maximum severity. Items do not reflect any theory regarding the etiology or the underlying processes in depression but were chosen because of their overt behavioural manifestations of depression.

Beck drew his patient population from routine admissions to the psychiatric outpatient department of the hospital of the University of Pennsylvania and the Philadelphia General Hospital.
The original group consisted of 226 patients and the replication group of 183 patients. The predominance of white over negro patients and the high frequency of patients in the lower socio-economic groups somewhat biases the study, however.

As external criterion, 4 experienced psychiatrists interviewed the patients and rated them on a 4-point scale for depth of depression. They agreed beforehand on the criteria for each of the entities. Indices of depression used by the psychiatrists were (1) appearance, (2) thought content, (3) vegetative signs and (4) psychosocial indices. Patients were also rated on degree of agitation and overt anxiety as well as presence of symptoms and disturbance in concentration, memory, recall, judgement and reality testing.

b. Reliability

Agreement among the psychiatrists regarding the major diagnostic categories of psychotic, neurotic and personality disorder was 70% in 154 patients seen by two psychiatrists.

The degree of agreement in the rating of depth of depression was higher, namely 97% within one degree on the 4-point scale.

Internal consistency was assessed by means of the Kruskal-Wallis Non-Parametric Analysis of Variance by Ranks. It was found that all categories showed a significant relationship to the total score of the inventory. Significance was beyond the .001 level for all categories except category 19 (weight-loss), which was significant at the .01 level.

Internal consistency was also assessed by means of split-half reliability, yielding a reliability coefficient of .86 and with a Spearman Brown Correction it rose to .93 for ninety-seven cases selected in the first sample.
The stability of the inventory was assessed indirectly by a variation of the test-retest method. The test was administered to a group of 38 patients at two different times. Each time a clinical estimate was made by one of the psychiatrists. Changes in the score were found to parallel changes in the clinical rating of depth of depression.

Another indirect measure of inter-rater reliability was achieved by plotting scores of each of the 3 interviewers against the clinical ratings. Again a high degree of consistency among the interviewers was observed.

c. Validity

A table of distribution of mean and standard deviations of Depression Inventory scores according to depth of depression was drawn up. The Kruskal-Wallis One-Way Analysis of Variance by Ranks was used to evaluate the statistical significance of these differences. For both the original group and the replication group the p value of these differences was <0.001 (Beck, 1967).

Also, a Pearson biserial r was computed to determine the degree of correlation between the scores on the depression Inventory and the clinical judgement of depression. The obtained biserial coefficients were .65 in study I and .67 in study II.

The relationship between the Depression Inventory and the Hamilton rating scale was investigated by Schwab et al. (1967) and the Spearman Rank Correlation Coefficient obtained was .75.

Beck (1967) attempted to assess the test's predictive power of clinical change and found that it was able to correctly predict in 85% of cases the change in clinical depth of depression.
Beck also found a correlation with other tests, especially with the MMPI but thought this was possibly due to similarities in item content and type of measure.

The Depression Inventory was found to discriminate between anxiety and depression more effectively than the MMPI Depression scale.

Construct validity was assessed and the construct depression defined as

"an abnormal state of the organism manifested by signs and symptoms in terms of a continuum from no depression to maximum depression".

In addition, it was made clear that depression can occur together with any combination of other variables, i.e. anxiety, obsessions, etc. The theory which the author tested is that depressives scoring high on the Depression Inventory

"have had life experience, during the developmental period that predispose them to react to stress later by appearance of, or exacerbation of, depressive symptomatology".

Beck's major predictions were that (1) depressed patients have "masochistic" dreams (unpleasant themes), (2) a negative self-concept, (3) identity with the "loser" on projective tests dealing with success and failure, (4) have had a childhood history of deprivation that sensitized them to depression later in life and (5) respond to experimentally induced failure with a disproportionate drop in self-esteem and increase in hopelessness.

Using the Depression Inventory as a criterion measure, the author found these hypotheses were supported on the whole.

Other investigators have provided further evidence of the test's construct validity. Gottschalk et al. (1963) found a negative correlation with the Hostility Out Scale whereas Nussbaum et al. (1963) found a negative correlation between scores on the Depression Inventory and those on a sense of humour test.
In the pharmacological sphere it was found that after administration of antidepressant medication, patients showed a significant decrease in their scores on the Beck Depression Inventory (Pichot, 1966) (in Beck).

d. General Research Findings

Delay et al. (1963), in administering a French translation of the Depression Inventory to 79 depressed patients found that the individual items of the Depression Inventory correlated positively with the total Depression Inventory scores. This they felt to be an indication that the test contained a "general factor" of depression.

Pichot and Lempérière (in Beck 1967) collected another 56 cases, thus bringing the total number to 135 cases of depression. They extracted 4 factors from the data, namely (1) Vital depression, (2) Self-abasement, (3) Pessimism-suicide, and (4) Indecision-inhibition. In a more recent study, Pichot obtained a correlation of .74 on the general factor score with improvement as judged by clinical ratings (ibid.).

Beck correlated background variables with Depression Inventory scores and depth of depression ratings and found that the women in his sample tended to be more depressed than men on the whole. However, it seemed that age did not play a role in depth of depression, as is often supposed, but educational level did, since patients with a lower educational background tended to have higher Depression Inventory scores on the whole. This the author felt was attributable to response set due to lower vocabulary skills.
A social-desirability inventory was constructed by the author to assess response set and its effect on scores on the inventory. Beck found that, in rating themselves on a number of variables such as intelligence, looks, etc., depressed patients tended to downgrade themselves. Thus Beck felt that a social desirability set might in itself be considered as diagnostic of depression. The author (Beck, 1967) therefore concluded that response sets do not detract from the validity of the test.

e. Evaluation of the Beck Scale

The need for an instrument capable of measuring depth of depression which approximates clinical judgements of intensity of depression led to the development of the inventory. The underlying assumptions were that: (1) it would meet the problem of clinical diagnosis as mentioned above; (2) it would be economical in administering; (3) it would lend itself to statistical manipulation, and (4) that it would be more sensitive to changes than the psychiatric interview because of the wide range of scores.

The validity and reliability data presented for the inventory are deemed sufficient to justify its use. The Depression Inventory seems to be an instrument which may be used by professionals and paramedics in the detection of depression.

f. Usefulness in terms of the present study

The Beck Depression Inventory was chosen for this study rather than the Beck Hopelessness Scale (Beck, 1974), the Hamilton rating scale or the Zung scale for various reasons. The Hopelessness scale assesses only the cognitive aspects of depression without
tapping the physiological and behavioural aspects of the depression syndrome. Also, the scale has not been investigated sufficiently for sensitivity through continued clinical use.

The Hamilton Rating scale ideally requires 2 physicians who independently assess the patient on 21 symptoms of depression. A disadvantage of this scale is that questions asked are not standardized and that this method of assessment is too cumbersome for the purpose of the present study.

The Zung rating scale is a 4-point self-rating scale in which questions asked are not as specific as those of the Beck 4-point rating-scale, e.g. Zung words his questions as follows: "I notice I am losing weight", whereas Beck mentions more specific weight loss of 5 lbs, 10 lbs and 15 lbs. The Zung scale is worded in a more positive way compared to the Beck scale, e.g. "I feel hopeful about the future", whereas Beck states that he has taken into account the negative response set of depressives as being diagnostically significant.

However, both observer-rating and self-rating scales do not assure complete accuracy in the measurement of depressive symptomatology. Differences in scores of observer- and self-rating inventories may be attributed to the personality and life style of the individual, depending on whether he is a "sensitizer" or a "repressor" (Zung, 1973). "Sensitizers" are those individuals who tend to be oversensitive and who overinterpret and ruminate about potential or real threats and conflicts, whereas "repressors" are those who tend to use avoidance, suppression, repression and denial or potential threats and conflicts. From his research in this area, Zung concluded that greater sensitization and less
repression appeared to correlate with poorer ego development as postulated by psychodynamic theories of personality development.

Since no other instrument has been devised as yet which circumvents the above-mentioned difficulties, it is deemed that the Beck Depression Inventory is at present one of the best instruments available for measuring depression and as such should be included in the present study.

2. 2.2. The Hostility Direction of Hostility Questionnaire

a. The test
The authors claim that this questionnaire was designed "to sample a wide, though not exhaustive range of possible manifestations of aggression, hostility and punitiveness".

Foulds constructed the questionnaire on the basis that general punitiveness was a suitable measure of egocentricity and its corrolary, a lack of empathy. Thus, the less a person is able to emphasize with others, the more disturbed that person is likely to be. Psychopathology, including depression, is therefore conceived of as a continuum from normality through personality disorder, personal illness and psychosis to non-integrated psychosis, with increased failure to maintain or establish mutual personal relationships. Conversely, the more successful one is in establishing significant relationships, the less likely one is, under stress, to resort to blaming, either oneself or others.

The questionnaire is composed of 51 items drawn from the MMPI and is of a forced choice nature. The respondent is asked
to fill in the questionnaire by hand, by deciding whether the item is on the whole true or false. The test consists of 5 subscales, namely:

AH - urge to act out hostility
CO - criticism of others
PH - projected delusional hostility
SC - self criticism, and
G - guilt.

The first of the above three tests were designed to measure extrapunitive manifestations of hostility and the last two tests were designed to measure intro-punitive manifestations of hostility. As a second part of the score, the three extrapunitive tests may be contrasted with the 2 intro-punitive tests to obtain a measure of the direction in which a person turns his hostility, either outwards or inwards.

**Scoring**

Hostility is calculated be means of the simple sum of all five tests:

\[ \text{Hostility} = AH + CO + PH + SC + G \]

Direction of hostility is the sum of the intro-punitive tests (with SC counted twice over) less the sum of the extrapunitive tests:

\[ \text{Direction of Hostility} = (2SC + G) - (AH + CO + PH). \]

**b. Reliability**

The authors considered the only approach to an estimate of reliability in this test to be the calculation of test-retest correlations. A sample of 15 normal men and 15 normal females were tested and retested a year later. Test-retest correlation
was found to be .75, the test mean 11.40 and retest mean 10.23.

In another sample the battery was administered to neurotic inpatients on four occasions, on admission, after 6 weeks of intensive therapy, on discharge and one year after discharge. On the last occasion patients were allotted to a success or failure group according to the outcome of treatment. Test-retest correlations for the Failure group range from .73 to .87 and for the Success group from .33 to .50. In patients whose therapy was successful there was a considerable fall in the mean and direction scores.

c. Validity

Validity rests on the assumption that psychotics have more aggression than neurotics, since psychotics are more disturbed. Neurotics in turn have more aggression than normals on the whole. Results show that the mean scores of psychotics, neurotics and normals lie in descending order on the hostility component. This argument suffers from the weakness of the method of criterion groups.

The second argument of the authors ran as follows: it was assumed that paranoid patients should be more extrapunitive compared to neurotics and extreme paranoids more extrapunitive than less extreme paranoids. To test this assumption, a sample of paranoids split into groups with and without an admixture of depression was tested. A sample of depressives split into groups with endogenous depression and with manic depressives in the depressive phase was also tested. The results confirm that paranoids are at the extrapunitive end of the scale and melancholics at the intropunitive end, whereas the non-paranoid schizophrenics are in between.
Furthermore, it was discovered that the normal sample lies towards the extrapunitive end of the continuum. On the basis of these findings, the authors assumed that normals are extrapunitive relative to neurotics. Paranoïds are more extrapunitive to normals, since the threat which they present is more evident than that of normals. The authors conclude that there is no justification, however, for assuming that every paranoid is more extrapunitive than every non-paranoid schizophrenic.

Moreover, the authors correlated the first two components (AH & CO) with various other measures, such as the Maudsley Personality Inventory, the K-scale of the MMPI and the HDS (Caine and Hope, 1964). They found that hostility measured by the first component is the amount of hostility which is allowed to enter the respondent's consciousness. Support for this interpretation can be derived from the fact that hysterics have less hostility than other neurotic groups. They suggest that this is evidence that somatization of aggression has not been included in the battery.

Foulds et al. (1960), in assessing the validity of the sub-scale found that psychopaths scored significantly high on two extrapunitive scales AH and CO, but on the other extrapunitive scale PH, melancholics and paranoïds exceeded them. On the SC scale neurotics scored significantly higher whereas normals scored lower. On the G scale psychopaths and melancholics scored significantly higher, while hysterics and normals scored significantly lower on this scale. This is contrary to expectations for psychopaths.

Normative data from subjects in North-East England revealed that the Scottish group scored higher on General Hostility and were more intropunitive than the English (Abelsohn, 1973).
d. **General Research Findings**

The authors state that, while neurotics are more hostile than normals, this is true only on the average and may not necessarily be true for individuals. They therefore attempted to discriminate between neurotics likely to get better from those who are not likely to get better on the basis of their scores on admission to hospital (Caine, 1965). It was found that the Direction score contributed 50% of the predictive power of the test.

According to research findings, Mayo (1966) Caine (1965) and Foulds (1965) discovered that neurotics and depressives show a drop in Hostility and a decrease in Intropunitiveness with improvement in their condition. Foulds (1966) demonstrated that patients with psychosomatic complaints tended to score lower on Hostility than patients who claim to have mainly psychological symptoms.

Studies by Foulds, Caine and Creasy (1960) investigating the statistical relationship between the various subscales revealed that the correlations between the scales were positive. By combining both extrapunitive and intropunitive scales they arrived at a general punitive factor which could be justified on the basis of a high correlation. In addition, a higher correlation between the extrapunitive scales than the intropunitive scales was found, which led the authors to believe that the extrapunitive scale measured something different from the intropunitive scale. The measurement of Direction of Hostility could be justified on the basis of dominance of one type of hostility over another.

Findings also point to the advantage of scoring intropunitiveness and extrapunitiveness separately rather than combining them in a
Direction of Hostility score for diagnostic reasons. Normals tend to score lower on intropunitiveness than extrapunitiveness according to Foulds, whereas neurotics and depressives show a decrease in intropunitiveness with successful treatment. (Abelson, 1973). It is suggested that the degree of intropunitiveness may be an indicator of personal disturbance in the form of psychiatric illness whereas extrapunitiveness is more related to psychopathy.

e. Evaluation

The H.D.H.Q. was devised to measure general hostility or aggression as well as the direction of the aggression. Reliability and validity data presented by the authors are of a sufficiently satisfactory nature to justify its inclusion in the present study. The specific advantage of this questionnaire is that the test appears to have the ability to discriminate between direction as well as the amount of hostility.

f. Clinical Usefulness

The authors do not recommend that the test be regarded as a diagnostic device. They suggest that the test be used in conjunction rather with the Symptom Sign Inventory (Caine et al., 1967) which provides the diagnosis.

As stated above, the utilization of the test is justified on the assumption that hostility and guilt are of central importance in the development of psychiatric illness. The authors suggest that melancholics introject their hostility whereas paranoids project their hostility on others. Psychopaths tend to act out their hostility to a greater degree than do normals. Inclusion
of this questionnaire in the present study might verify findings that depressives turn their anger inwards, and that depth of depression and amount of hostility correlate, thus duplicating findings of previous research workers.

2.2.3. The Family Relations Test (adult version), by E. Bene, 1965.

a. The test

This test is described as an objective technique for exploring recollected childhood feelings. The author argues for the desirability of the existence of such a test in that "the emotional life of an adult has its roots in the feelings he had as a child towards his parents and the other members of his family and in the attitudes he felt they had towards him". According to her, the test has a two-fold function, firstly to facilitate the recollection of childhood family feelings and, secondly, to obtain these recollections in a systematic and quantifiable form.

Furthermore, the test is designed to explore attitude areas such as:

1. mild positive and strong positive attitudes, the latter dealing with more intense "sexualised" feelings, for former with feelings of friendly approval;
2. mild negative and strong negative attitudes, the milder attitude one of disapproval, the stronger attitude one of hate and hostility;
3. maternal overprotection, e.g. "Mother used to worry that this person in the family might catch cold";
4. paternal overindulgence, e.g. "Father used to pamper this person in the family";
5. competence of parents, e.g. "This person could be firm with the children if necessary".
The items also vary in direction of feeling, either towards one other person or feelings the other person had towards the subject.

The test consists of 20 ambiguously drawn cardboard figures sufficiently stereotyped to stand for the various members of a family. In addition to family figures a "nobody" is incorporated to accommodate items which do not apply to anyone in the family. Each figure is attached to a box-like base which has a slit on the top. The subject is asked to read items on the 96 cards and to put each "into the person it fits best". Normally, all the persons with whom the subject lived until he was 15, i.e. nannie, an uncle or a granny, should be included in the test.

Some items always carry significance, e.g. "This person in the family used to make me feel afraid". Significance may vary for some items according to whom they were given, e.g. "Sometimes I felt like hitting this person in the family" has no special significance if the figure is the younger brother, but has special significance for the mother.

The total number of items for any one person is the measure of emotional involvement. Displacement of feelings from the parents to another member may occur.

To determine the quality of the feelings the subject expressed towards his parents, his responses expressing feelings towards and from each person are both classified into five categories. If a subject used more than three times as many positive as negative items, his response is called "positive", and if he used more than three times as many negative as positive, his response is called "negative". If he used more than twice as many positive as negative items, his response is called "tending towards positive", and if
he used more than twice as many negative as positive items, his response is called "tending towards negative". When the number of items more or less balance, or where less than three items were used, his response was called "ambivalent or indifferent". Each subject was given a rating on a five point scale according to the quality of his feelings toward his father and mother, and from his father and mother as follows:

Positive feelings (2)
Tending towards positive (1)
Ambivalent or indifferent (0)
Tending towards negative (-1)
Negative (-2)

b. Reliability

For the Family Relations Test none of the usual methods for assessing reliability are deemed suitable by the author. The test-retest method is deemed impractical because the author is of the opinion that finding enough subjects to co-operate for the second time would be rather difficult, which is rather a weak argument. Nor is the split-half method suitable according to her, since items are not homogeneous. A modified form of this method was attempted by restricting the items to expressing positive and negative feelings. Correlations obtained for positive and negative feelings with odd and even numbered items would indicate that the FAT is reasonably reliable (from .75 to .87 Corrected r obtained by the Spearman-Brown prophecy formula). There do not appear to be any other published reliability data.
c. Validity

An attempt was made
"to compare test results of the adult patients with descriptions of
the relationship they had as children with their parents as found
in their psychiatric case histories". (Bene, 1965).

The test was administered to patients in psychiatric
hospitals, "but early family relations were not always sufficiently
detailed. Often it was difficult establishing whether a subject
or a relative had given the information. Results of comparison
between case history material and the patient's test responses
yield: 20 Agreement, 8 Partial or fair agreement, and 2 No agreement.

Validation against external criteria has been attempted by
means of research work on homosexuality. Results are consistent
and can be fitted into psychological theory. The author suggests
that the adult version of the FAT can be used with reasonable
confidence (Bene, 1965).

A study on normal, clinic and delinquent children confirms
that the Family Relations Test is able to discriminate between
the groups on administration of the children's form of the test.
Also, it can distinguish between the test responses of well-
adjusted and poorly adjusted school children (Abelsohn, 1973).

d. Research

According to the investigations, homosexuality was more
closely connected with a lack of good relations with the father
than with overly strong attachment to the mother. Both male and
female homosexuals tended to express less affectionate feelings
about either of their parents than normals and more thought their
fathers as incompetent and weak more often than normals (Bene, 1965).
It was also found that in large families there was more indifference between subjects and their parents. Age of the subject did not yield any significant difference but subjects whose fathers had manual occupations more frequently believed that their parents had been indifferent towards them than those whose fathers had non-manual occupations.

e. **Evaluation of the Family Relations Test**

The test has unfortunately not been used much as a clinical and research tool. Most studies which have been published have used the children's version of the FRT. This version has a slightly different form and also slightly different items from the adult version.

No information is given about selection or the weight given to the various test items, so that one cannot assess whether they are classified correctly, e.g. "This person in the family likes to help you with your bath" is regarded by the author as "Strong positive" whereas in actual fact they may be interpreted as a task which mother or elder sister may have to help the subject in question with.

Adults find the test situation non-threatening and are able to enjoy it on the whole more than paper and pencil questionnaires. Very depressed or hostile patients may complain that they cannot remember their feelings so far back in the past and that they get mixed up with their present feelings. The disadvantage of this happening would be that the test thereby loses its relative objectivity.
In spite of the above drawbacks, the Family Relations' Test was selected for inclusion in this research project because it is the only instrument available at present which taps recollected childhood feelings in the family. The reliability and validity data are sufficiently encouraging to legitimize the use of the test as a research instrument.

f. Usefulness of the Family Relations Test

As has been mentioned above, it is uncertain how well childhood recollections mirror the actual feelings in the family many years ago. Another question which may be raised is whether one should not ask another person whose memories might be more objective about actual family feelings in childhood. To both questions the author replies that the person's own concept of his childhood has greater bearing on his present behaviour than his "objective past" as reconstructed by another person.

The fact that the author was able to differentiate male homosexuals and married men as well as female homosexuals and heterosexual women on the basis of their perception of their childhood feelings towards and from their parents suggests that utilization of the test for research purposes would be legitimate.

2.2.4. The Rotter Internal-External Control Scale


a. The Test

This scale has been chosen to measure the difference in perceived locus of control between depressives and non-depressives. Group differences in behaviour result when the subjects perceive
reinforcement as contingent on their behaviour versus chance control. Rotter et al. (1972) saw the role of reinforcement as being crucial in the acquisition of skills and knowledge. The difficulty is however, that events which may be perceived as rewards by some individuals may be differently interpreted by others. This would depend on whether the individual views the reward as a result of his own behaviour, or as a result of external forces and thus independant of his own actions. The effect of reinforcement may depend on whether the person perceives a causal relationship between his behaviour and the reward. This causal relationship can vary in degree. Thus, whenever reinforcement is seen to be the result of luck or chance, this is labelled external control but if the reinforcement is the result of a person's own behaviour this is termed internal control. In terms of social learning theory (Rotter, et al 1972)

"a reinforcement acts to strengthen an expectancy that the particular behaviour or event will be followed by that reinforcement in the future ........ It follows as a general hypothesis that when the reinforcement is seen as contingent upon the subject's own behaviour that its occurrence will not increase an expectancy as much as when it is seen as contingent. Conversely, it non-occurrence will not reduce an expectancy so much as when it is seen as contingent".

Rotter quotes the work of others who suggested a relationship between general passivity and belief in chance or luck. Other research workers saw alienation as linked with powerlessness (external control); its opposite, namely an attempt to master
the environment has been described in terms of competence or autonomy.

Investigations on the need for achievement were also thought to have a relationship with internal versus external control of reinforcement, though the author admits that this relationship may not necessarily be linear.

In discussing his scale Rotter indicates that people at either extreme of the reinforcement dimensions are likely to be maladjusted. Those in the middle of the continuum were conformists who are actively trying to learn and adjust to the rules of the society they live in.

Investigations of differences in behaviour re skill and chance situations provide the following findings: when the subject perceives the task as controlled by the experimenter, or chance or random conditions, past experience is relied upon less. Thus he learns less or he learns the wrong things, for instance, Skinner's "superstitious behaviour" being one of the wrong associations.

The first attempt to study chance and skill effects on expectancies of reinforcement was begun by Pares (in Rotter et al., 1972) who developed a Likert-type scale with 13 external and 13 internal attitudes. Then James revised the Phares test in 1957. This James-Phares test was in turn broadened (in Rotter et al., 1972); subscales were developed for areas such as achievement, affection and general social and political attitudes. Social desirability was controlled for by a new forced-choice questionnaire which originally included 100 items. This version was item analysed and factor analysed and reduced to a 60-item scale on the basis of internal consistency criteria. It was found
however, that achievement items tended to correlate highly with social desirability. Items which had a high correlation with the Marlowe-Crowne Social Desirability Scale were eliminated. Finally the scale was reduced to 29 items, forced-choice test, including 6 filler items intended to make the purpose of the test more ambiguous. Biserial item correlations are moderate but consistent.

Internal consistency estimates are relatively stable and only moderately high ($r = .65 - .79$). Since the test is an additive one, items are not comparable. Thus split-half or matched-half reliability underestimate internal consistency.

Test-retest reliability for a 1-month period seems quite consistent in 2 different samples ($r = .60 - .83$). Somewhat lower reliabilities for a 2-month period ($r = .55 - .83$) may be due to the fact that the first was given under group conditions and the second test was individually administered.

Correlations with the Marlowe-Crowne Social Desirability Scale in college students ranged between $-0.07$ to $-0.35$.

Unusually high correlations between the Marlowe-Crowne Social desirability and the I-E scale were obtained for a prisoner population, probably because they did not believe the instructions that the test scores would not become part of their permanent records.

Correlations with intelligence and I-E control were investigated by two independent studies and the correlations were found to be low. Sex differences also appear to be minimal according to Rotter, but the negro population was found to be more external than white offenders in a correctional institution.
Studies with Peace Corps volunteers and young male prisoners suggested that the scale can be significantly affected by testing conditions. High internal mean scores can be accounted for on the basis of the high correlation with social desirability under particular testing conditions.

In considering discriminant validity, the question of the relationship to adjustment is raised. Theoretically internality would be related to good adjustment in our society. The relationship would not be linear but curvilinear or U-shaped with seriously maladjusted groups expected to have more variability on the I-E scale and more scores tending towards externality.

In summary, the test shows reasonable internal consistency, but is limited in ability to discriminate individuals. Rotter suggest that the scale is more suitable for investigations of group differences than for individual prediction.

b. Multimethod measurement

Two studies of non-questionnaire approaches have been made. Adams-Webber (in Rotter et al., 1972) compared the forced choice I-E scores with scores from a story completion test. Scoring was based on whether consequences of an immoral act followed from the individual's behaviour or were due to chance. Analysis of variance yielded a highly significant difference among the groups who scored high on whether they choose "luck" or not.

Two investigations were recorded where a significant relationship was found between higher socio-economic class and internality. In the Negro population, the lower class was found to be more external than the middle class negroes.
Investigations of individual differences on the I-E variable in controlled laboratory tasks have found the differences to be significant or near significant and, in addition, it has been found that externals tend to produce more unusual shifts in expectancy after success or failure than internals.

The construct regarding the I-E dimension is relevant to attempts of people to better their life conditions and control their environment in important life situations. Here Rotter approximates Bibring's concept of depression, i.e. helplessness, for Rotter writes that the test appears to measure "A psychological equivalent of the sociological concept of alienation, in the sense of powerlessness".

In a study with TB patients it was found that, as expected, internals knew more about their own condition and questioned the doctor more than externals. In another study with inmates of a reformatory, those who remembered more about how the reformatory was run, about parole, etc., were more internal. A significant difference was found in activists in a Negro civil rights movement, with activists being more internal than those who did not take part.

Rotter hypothesises that, on the basis of the above investigations, related to the feeling that one can control the environment is also a feeling that one can control oneself. A group of studies on smoking suggests that non-smokers were significantly more internal than smokers and those who quit were more internal than those who believed a report on smoking but did not quit. These studies lend support to the hypothesis that a generalised expectancy that one can affect the environment through one's own behaviour can be reliably measured.
In studies on the relationship between Achievement motivation and I-E control, (McClelland et al. 1953) it was found that college students and adult males may have more external views as a defense against failure but who were originally highly competitive. It is not clear how the authors arrived at the conclusion that these groups were originally competitive and how this was investigated.

Construct validity has also been investigated, involving variables of independence, suggestibility and conformity as related to I-E control. Externals expecting control from the outside would be less resistive to manipulation than internals, but with regard to conformity and suggestion, internals may go along consciously if they perceive that it is to their advantage to conform. Four studies undertaken support one another on the above hypotheses. These findings have considerable significance for the general area of persuasion and propaganda.

Little work has been done on antecedents regarding attitudes of internal versus external control. Studies on different cultures, i.e. the Indians, the Spanish Americans and whites, suggest that whites are more internal. It seems that, with regard to religious affiliation, external fatalistic attitudes by parents are more likely to determine the attitude of the children than the doctrines of the sect. It is expected that unpredictable parents would make for externality in the child.

In summary, the person who believes that he can control his own destiny will take steps to improve his environmental conditions, place greater value on skill and will be more concerned with his ability; he will be resistive to suggestion and will be more alert to those aspects in the environment which provide useful information for his future behaviour than externals.
3. **Subjects**

This study will include three groups of subjects, namely:

a. 10 hospitalised patients who have been clinically diagnosed as depressed by a psychiatrist and who, in addition, have a high score on the Beck Depression Inventory;  

b. 10 recovered patients who were previously diagnosed as depressed by a psychiatrist and who have been discharged on outpatient follow up treatment and who have a lower score on the Beck Depression Inventory than the depressed group;  

c. 10 control nonhospitalised persons who have never been diagnosed as depressed and who have a low score on the Beck Depression Inventory, roughly matched for sex and age.

The samples were much smaller than originally planned (10 instead of 33 in each group) due to the fact that:

1. it was not possible to test depressives with gross motor retardation;  

2. the strict criteria for inclusion in the samples made it necessary to test a large number of subjects before a sample meeting the requirements could be met.

With reduction of sample size, the power of the statistical test is reduced. The probability of a Type II error is increased, however.

3.1. **Depressed subjects**

The subjects were selected according to the following criteria:
1) They were patients in a mental hospital who were diagnosed by a psychiatrist or a clinical psychologist as suffering from primary depression (e.g. psychotic depression, neurotic depression, reactive depression, or manic-depressive psychosis - depressive type);

2) They were between the ages 18 and 72 years of age;

3) They were at least of normal intelligence to enable them to answer the questionnaires;

4) Immigrants were excluded from the study and only English speaking or bilingual subjects (Afrikaans and English) were included;

5) Subjects with any history of organic impairment (e.g. epilepsy or brain injury) were excluded without exception;

6) Subjects with any history of alcoholism or drug dependence were in the main excluded. However, two of the subjects might have had an alcohol problem before treatment, but at the time of testing both of them had been dry for a couple of months;

7) Psychiatric diagnosis was not the major criterion for inclusion because of the possibility of contamination of this criterion. A high score on the Beck Depression Inventory was used as the main criterion for depression. Those who were diagnosed as depressed but who did not have a high rating on the Beck Depression Inventory were excluded from the Depressed group;

8) The Depressed group consisted on the whole mainly of relatively new admission, and they were only tested if considered able to communicate well enough to complete the tests without showing gross signs of motor retardation or excessive fatiguing. One or two depressed subjects were also derived from the Outpatient clinic and were treated on an outpatient basis;
3.2. Recovered Subjects

The Recovered group consisted of patients who had been discharged from hospital or were about to be discharged on outpatient follow up treatment, and who primarily had a low score on the Beck Depression Inventory. Treatment consisted of medication and/or psychotherapy and/or group therapy.

3.3. Control Subjects

The control subjects were selected according to the following criteria:

1) They were normal subjects without any psychiatric history of their own who were selected from a population of paramedical staff not familiar with the tests used and acquaintances of the author and who primarily had a low rating on the Beck Depression Scale;

2) They were between the ages of 18 and 72 years and reported to have English as their home language or to be sufficiently bilingual South Africans (Afrikaans-English) so that they were able to understand the tests involved;

3) They were of at least normal intelligence so that they were able to understand the questions asked. Immigrants and subjects who were not proficient in English were excluded;

4) There was no history of organic impairment, epilepsy, alcoholism or drug abuse;

5) Those who admitted to suffering from depression but who had never sought psychiatric treatment were excluded;

6) An attempt was made to select a sample with a similar distribution to the Depressed sample with respect of age and sex;

7) Subjects who had never sought psychiatric help, had never been hospitalised but who, nonetheless obtained a high score on the Beck Depression Inventory were excluded from the study.
3.4. Rationale for statistical procedure

The data were on the whole suitable for appraisal by techniques utilising multivariate analysis of variance.

By means of the above technique, a Manova was done on variables 1, (General Hostility), 2, (Direction of Hostility), and 3, (Internal-External Control).

A second Manova was done on variables 4 (Outgoing feelings towards the father), 5, (Outgoing feelings towards the mother), 6, (Incoming feelings from the father), and 7, (Incoming feelings from the mother), 8, (Overprotectiveness by mother), 9, (Overprotectiveness by father), and 10, (Overindulgence by mother).

It was necessary to split the analysis in this fashion for two reasons:

a. the number of variables were equal to the number of subjects per group.

b. the capacity of the computer programme was 8 variables in any one analysis.

The multivariate analysis of variance is suitable because it provides a way which will compare the means of a number of samples simultaneously and will obviate the repeated use of the t-test which would involve a large type I error. The precision of the technique with multiple factors is improved when matched samples are used as is the case in this study.

3.5. Procedure

Subjects were asked if they were willing to take part in a research project to investigate how family feelings before age 15 influenced emotional difficulties in adulthood. Standard administration procedures for the various tests were followed.

The experimenter effect was controlled for by having the same person administer all the tests to all the groups.
RESULTS

The following tables summarize the main scores from all the subjects on the measures employed.

Table 1 gives the scores of the Experimental group, Table 2 those of the Recovered Group and Table 3 those of the Control Group.

All three tables summarize the following scores:
1. The Beck Scale scores (Beck);
2. The General Hostility scores (HDHQ);
3. Direction of Hostility scores (Direction);
4. The Internal-External scores (Rotter).

Tables 4 (Experimental Group), 5 (Recovered Group) and 6 (Control Group) summarize the following scores:
1. positive and negative outgoing feelings towards father;
2. positive and negative outgoing feelings towards mother;
3. positive and negative incoming feelings from father;
4. positive and negative incoming feelings from mother;
5. overprotectiveness by mother;
6. overprotectiveness by father;
7. overindulgence by mother.
### TABLE I

**EXPERIMENTAL SUBJECTS**

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<tr>
<th>Ss</th>
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**Summary of Beck Scale scores, H.D.H.Q. scores, Direction of Hostility scores and Internal-External control scores (Rotter), Means and Standard Deviations.**

\[
\begin{align*}
\text{MEAN} & = 28.4 \\
\text{STD.DEV.} & = 5.56178
\end{align*}
\]

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\begin{align*}
\text{MEAN} & = 6.1 \\
\text{STD.DEV.} & = 6.13641
\end{align*}
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\[
\begin{align*}
\text{MEAN} & = 10.4 \\
\text{STD.DEV.} & = 6.13641
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\]
### TABLE II

**RECOVERED SUBJECTS**

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| MEAN = 17.8 | MEAN = 3.6 | MEAN = 11.9 |
| STD.DEV. = 9.2832 | STD.DEV. = 5.48128 | STD.DEV. = 3.10734 |

Summary of Beck Scale scores, H.D.H.Q. scores, Direction of Hostility scores and Internal-External control scores (Rotter), Means and Standard Deviations
### TABLE III

**CONTROL SUBJECTS**

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Summary of Beck Scale scores, H.D.H.Q. scores, Direction of Hostility scores and Internal-External control scores (Rotter), Means and Standard Deviations.
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<th>M. (OUT)</th>
<th>F. (INC.)</th>
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STD. DEV. = .849337  STD. DEV. = .675955  STD. DEV. = .916937  STD. DEV. = .823273  STD. DEV. = 1.70234  STD. DEV. = .948683  STD. DEV. = .316228

Summary of outgoing feelings towards father, & towards mother, incoming feelings from father & from mother, overprotectiveness by mother, by father, and overindulgence by mother, means and standard deviations.

2 = strong positive  1 = mild positive  0 = ambivalent

-2 = strong negative -1 = mild negative
### RECOVERED GROUP

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**Mean and Standard Deviations:**

- **Mean:**
  - F. (OUT): 1.6
  - M. (OUT): 1.3
  - F. (INC.): 1.5
  - M. (INC.): 1.1
  - M. OVERPR.: 2.9
  - F. OVERPR.: .8
  - M. OVERIND.: .4

- **Standard Deviation:**
  - F. (OUT): .699206
  - M. (OUT): .823273
  - F. (INC.): .849637
  - M. (INC.): .875595
  - M. OVERPR.: 2.079
  - F. OVERPR.: 1.61933
  - M. OVERIND.: .843274

**Summary of Outgoing Feelings towards Father, & towards Mother, Incoming Feelings from Father and from Mother, Overprotectiveness by Mother, by Father, and Overindulgence by Mother, Means and Standard Deviations.**

2 = strong positive  
1 = mild positive  
0 = ambivalent  
-2 = strong negative  
-1 = mild negative
### TABLE VI

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<th>Ss</th>
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<th>M. OVERPR.</th>
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Summary of outgoing feelings towards father, towards mother, incoming feelings from father, from mother, overprotectiveness by mother, by father, and overindulgence by mother, means and standard deviations.

- **2** = strong positive
- **1** = mild positive
- **0** = ambivalent
- **-1** = mild negative
- **-2** = strong negative

**Means and Standard Deviations:**

- **F. (OUT):** Mean = 1.2, Std. Dev. = 0.918537
- **M. (OUT):** Mean = 0.6, Std. Dev. = 0.843274
- **F. (INC.):** Mean = 0.5, Std. Dev. = 0.707107
- **M. (INC.):** Mean = 0.8, Std. Dev. = 0.768811
- **M. OVERPR.:** Mean = 2.6, Std. Dev. = 1.57762
- **F. OVERPR.:** Mean = 1.0, Std. Dev. = 1.24722
- **M. OVERIND.:** Mean = 0.8, Std. Dev. = 1.39841
In order to statistically evaluate hypotheses 1 - 3, a Manova was carried out. The Manova was found to be significant.

\[ F = 5.42292; \text{df: 6,50} \quad p < .01 \]

This direction was as expected.

The obtained F-ratios were sufficiently significant in two cases to warrant further analysis. Consequently the Tukey HSD procedure for a posteriori pair-wise comparisons was carried out.

With regard to variable 1

There is a significant difference in the amount of hostility experienced between some of the groups.

\[ F = 9.63641; (\text{df 2,27}) \quad p < .01 \]

This direction was as expected.

The Tukey HSD procedure for a posteriori pair-wise comparisons revealed the following:

| t crit. = 3.53  \( p < .05 \); (df = 3,27) |
| t crit. = 4.55  \( p < .01 \); (df = 3,27) |

| EXPERIMENTAL  | XXXX | 4.78 ** | 5.82 ** |
| RECOVERED     | XXXX | 1.04    |
| CONTROL       | XXXX |         |

The difference is primarily between the Experimental group and the two other groups which means that the results support Hypothesis I.

With regard to variable 2

There is a significant difference in the amount of inward hostility as shown between some of the groups.

\[ F = 3.55829; (\text{df 2,27}) \quad p < .05 \]

This direction was as expected.

The Tukey HSD procedure for a posteriori pair-wise comparisons revealed the following:

| t crit. = 3.53  \( p < .05 \) (df = 3,27) |

| EXPERIMENTAL  | XXXX | 1.44 | 3.74 * |
| RECOVERED     | XXXX | 2.30 |
| CONTROL       | XXXX |     |

\[ * = .05 \]
The difference is primarily between the Experimental and the Control Group, which means that the data support Hypothesis II.

With regard to variable 3

There is no significant difference in perceived locus of control between the three groups.
F = 2.03916 (df: 2, 27)
This was not as predicted, which would indicate that the results do not support Hypothesis III.

In order to statistically evaluate hypotheses 4 - 6, a Manova was carried out. The Manova was not found to be significant.
F = 1.23634 (df: 14, 42)

With regard to variable 4

Outgoing feelings towards father are not perceived to be significantly different between the three groups.
F = .632431 (df: 2, 27)
This direction was not as predicted, which would indicate that the results do not support hypotheses IV, V and VI.

With regard to variable 5

Outgoing feelings towards mother are not perceived to be significantly different between the three groups.
F = 1.80927 (df: 2, 27)
This direction was not as predicted, which would indicate that the results do not support hypotheses IV, V and VI.

With regard to variable 6

Incoming feelings from father are not perceived to be significantly different between the three groups.
F = 3.82258 (df: 2, 27) \( p < .05 \)
Even though this F-ratio is apparently significant, it may not be interpreted as such since the Manova F-ratio was not significant. The means 1.2, 1.5 and .5 are not in the expected direction, and the data do not support hypotheses IV, V and VI.
With regard to variable 7

Incoming feelings from mother are not perceived to be significantly different between the three groups.
F = .919352 (df: 2, 27)
This direction was not as predicted, which would indicate that the results do not support hypotheses IV, V and VI.

With regard to variable 8

Overprotectiveness by mother is not perceived to differ significantly in degree between the three groups.
F = 1.2048 (df: 2, 27)
This direction was not as predicted, which would indicate that the results do not support hypotheses IV, V and VI.

With regard to variable 9

Overprotectiveness by father is not perceived to differ significantly in degree between the three groups.
F = .768052 (df: 2, 27)
This direction was not as predicted, which would indicate that the results do not support hypotheses IV, V and VI.

With regard to variable 10

Overindulgence by mother is not perceived to differ significantly in degree between the three groups.
F = 1.33737 (df: 2, 27)
This direction was not as predicted, which would indicate that the results do not support hypotheses IV, V and VI.
4.1. Evaluation of the results in terms of the Formal Hypotheses proposed for the present study.

It is now possible to turn to an evaluation of the predictions of the present study with regard to some of the variables of depressive illness.

The first hypothesis was confirmed. Depressives were found to be significantly more hostile than normals or recovered depressives. These findings support Fould's concept that the amount of hostility was a suitable measure of degree of disturbance. In the case of the present study disturbance is equated with depression. It follows, therefore, that with the lifting of depression and upon recovery, the person becomes less hostile.

The second hypothesis was also confirmed. Depressives will tend to show significantly more inward hostility than normals or recovered depressives. These data are in keeping with Freud's and Bibring's models of hostility, namely that of anger turned inwards on the self as a result of object loss. Consequently self-esteem is lowered and the retroflexed anger manifests itself in the form of guilt and self-criticism. It follows that, as the depressive improves, he will tend more and more to release his aggressive impulses outwards onto the object world in the form of criticism of others and acting out of hostility rather than inwards on himself.

Hypothesis three was not confirmed. Subjects who are depressed do not differ significantly from normals on perceived locus of control in the direction of significantly less inner control. It could therefore not be demonstrated by means of the Rotter Scale that depressives are more dependent, less assertive and less inner-directed than normals. This is possibly due to the fact that Rotter's theory which holds that invalidating experiences will tend to generate less inner-directedness, does not apply in depressive symptomatology or,
on the other hand, that Rotter's theory may apply, but the measuring instrument as such is not able to differentiate depressives from non-depressives, or that other methodological considerations apply. The most likely explanation is that the methodology is inadequate in the present study, for both Miller (1975) and Seligman (1975) claim that non-contingent aversive stimulation and non-contingent positive reinforcement results in depression and helplessness. The latter argues that depressed successful people believe that they are currently rewarded not for what they are doing, but for who they are or what they have previously achieved. Perception of the self as a controlling individual is the fundamental factor in self-esteem, he claims, and perceived loss of control results in a feeling of helplessness. It is used to explain the depression which some beautiful women experience who are showered with reinforcers because of their beauty and not as a result of their own endeavours.

The fourth hypothesis was not confirmed. Subjects who are depressed do not differ significantly from normals or recovered depressives in the degree of negative feelings perceived (i.e. criticism or rejection) in the family before age 15. Because there was no significant difference, Bibring's model of helplessness could not be demonstrated. This may be due either to the fact that the Bene-Anthony Family Relations Test is not able to differentiate between the degree of family feelings in the depressive and the normal person, or that the excessive negative family feelings in childhood do not necessarily contribute to later lack of autonomy and helplessness. It follows that the assumption that excessive negative feelings in childhood will lead to the experience of a lack of self-worth later on in life, could not be demonstrated.
The fifth hypothesis was not confirmed either. Subjects who perceive an excessive amount of positive feelings in the family (i.e., between parent and child before age 15) will not tend to be significantly more depressed than subjects who perceive less extreme affection between their parents and themselves. Because no significant difference could be demonstrated, the data do not support Bibring's model of helplessness. The reason for this could be the same as was put forward in hypothesis 4, namely that the measuring instrument is not able to differentiate between family feelings of the depressive and normal subjects, or that excessive family feelings in childhood do not necessarily contribute to feelings of inadequacy and helplessness later on in life. Also the assumption that parents who are overinvolved with their children in the form of overindulgence or overprotection will discourage emotional separation, could not be proved either.

The sixth hypothesis was confirmed. The results do not show that recovered depressives differ significantly in the way they perceive their family relations before age 15 from depressives. Consequently it seems as if the assumption that family patterns are the same for depressives and for recovered depressives could be demonstrated but the results obtained must be viewed with caution however, for even though depressives and recovered depressives obtain similar scores, they do not differ from the control group. The data cannot therefore be said to support Bibring's model of helplessness conclusively.

**4.2. Methodological considerations**

Bearing in mind the limitations of small samples and the danger of the possibility of a type II error (which would yield non-
significant results when in fact the results are significant), the obtained results are held to be acceptable. The fact that two of the six hypotheses yielded significant results strengthens the author's convictions in this regard.

Of more serious consideration is the response set and the observer set in the assessment of depressed patients. The author of the present study concurs with the findings of Paykel et al. (1973), who found that concordance between self-report measuring instruments and ratings at a psychiatric interview was modest. The latter suggest that psychotic depressives and individuals with obsessional personalities tended to deny their symptoms relative to interview assessments. Neurotic depressives on the other hand, tended to rate themselves as more severely ill than did the clinician. Paykel et al. write:

"These systematic discrepancies appeared to reflect a self-report response set to exaggerate or minimize psychiatric symptoms together with rater set regarding certain types of patients". (ibid.)

The author of the present study experienced the same phenomena whilst administering the self-report questionnaires to both the depressed group and the recovered group. She did not devise a systematic psychiatric interview in which patients were rated for depth of depression. Such an interview would have to include the presence of at least two raters. An assessment of inter-rater reliability would also have been necessary. This was not undertaken due to the prohibitive length of the task and the lack of a second rater who would be available and willing to assist.

In the light of the above, it seems that the Beck Depression Inventory or any other self-report instrument designed to measure depth of depression should be used with caution, and should in fact
be supplemented with data from a psychiatric interview. If possible, background information should be obtained from relatives, friends and the work situation for a more accurate assessment. Unfortunately, Beck’s opinion that all depressives adopt a negative response set could not be demonstrated in this study. But it seems that Paykel et al.’s findings are more likely to be correct.

4.3. Implications for theory
   a. Freudian theory.

   The fact that hypothesis I was confirmed (i.e. depressives tend to show significantly more general hostility than normals or recovered depressives) supports psychoanalytic theory. According to this model repression against instinctual urges is the main defense of the depressive which leaves him little energy available for other activities. Being aware of the ego’s lack of interest, the depressive feels inferior. In addition to being self-abasing the depressive also feels guilty. This is so because the super-ego, on becoming aware of the immoral impulses, attacks the ego. This attack takes the form of guilt feelings. Furthermore, the depressive over-reacts to object loss (death, desertion, etc.) with more profound mourning than normals. The over-reaction takes the form of hostile impulses. Their expression also elicits guilt. Object loss weakens the ego and the repressive defense. The underlying hostility then becomes conscious. Part of the hostility is turned inwards against the ego (i.e. guilt, self-criticism), attacking and lowering self-esteem whilst part of the hostility is turned outwards against the object world, in the form of blaming and criticising others. The normal person generally shows less hostility, and does not resort to the above neurotic defense mechanisms.
The fact that hypothesis 2 was confirmed (i.e., depressives will tend to show significantly more inward hostility than normals) also connects with Freudian theory. As a result of object loss and a cutting off of narcissistic supplies for his ego, the depressive reacts with retroflexed anger, consequent guilt and inferiority feelings. Another source of self-depreciation is his failure to resolve the Oedipal complex. Because his infantile sexuality was a failure, the depressive assumes he will always be a failure. His sources of inferiority feelings will make him more hostile than the normal person who tends to direct his anger outwards, and in moderation.

The fact that hypothesis 3 was not confirmed, (i.e., depressives will differ significantly from normals in perceived locus of control in the direction of less internal control) does not confirm psychoanalytic thinking. Freudian theory employs two kinds of defense mechanisms, neurotic and normal defense mechanisms. Normal defense mechanisms are used for the proper functioning and development of the ego (i.e., rationalization, binding of mental energy to prevent flooding the individual with basic anxiety). Neurotic defense mechanisms oppose the id impulses by blocking off their discharge. Because the neurotic defense mechanisms are only partially successful, the person consequently has less inner control and is less inner directed than the person who uses normal defenses. The fact that this hypothesis was not confirmed implies that Freudian theory and Rotter's social learning theory are invalidated in the case of the depressive, or that both theories apply but that the methodology was inadequate in demonstrating this.

The fact that hypothesis 4 was not confirmed, (subjects who perceive an excessive amount of negative feelings in the form of criticism and rejection from their parents in childhood will tend
to be significantly more depressed than subjects who perceive their parents as warm and affectionate) does not support psychoanalytic thinking. According to the Freudian model, the depressive needs narcissistic supplies in the form of attention and affection to restore his depleted ego. In infancy these are available only from parental figures. If parents show instead an excessive amount of negative feelings, the child will experience this as object loss and he will react to this by depression. The normal person has not suffered object loss to such an extent. The fact that this hypothesis was not confirmed implies that Freudian theory is invalid for the depressive, or that the theory applies but the methodology was not able to demonstrate this.

The fact that hypothesis 5 was not confirmed, (subjects who perceive an excessive amount of positive feelings from their parents in childhood will tend to be significantly more depressed than subjects who perceive their parents as less extreme in their affection) does not connect with psychoanalytic theory. According to Freud, excessive feelings on the part of the parents will lead to continued dependence on others for self-esteem. Consequently the person may remain fixated at the oral stage of development. This is certainly the case of the regressed psychotic depressive. In the case of the neurotic depressive, an absence of psychotic features and the relative intactness of the ego suggests that the major regression is to a later stage, probably the anal-sadistic stage (Buss, 1968). The fact that hypothesis 5 was not confirmed, invalidates Freudian theory in the case of the depressive. On the other hand, the theory itself might be valid, but the results might be attributed to contrasting response sets in the case of the psychotic and the neurotic depressives. These
response sets might cancel each other out (i.e. minimization or exaggeration of symptoms and of family feelings).

The fact that hypothesis 6 was confirmed (subjects who have recovered from a depressive illness will not differ significantly in the way they perceive family relations from subjects suffering from depressive illness), ties in with Freudian theory. Recovered depressives, like depressives, must have suffered object loss at some stage. But the fact that the hypothesis was confirmed still does not show conclusively whether in fact family feelings were the same in childhood, since both groups could not be differentiated from the control group.

b. Bibring's model of helplessness

The fact that hypothesis 1 was confirmed, (i.e. depressives show significantly more general hostility than normals or recovered depressives) supports Bibring's model of helplessness. The rationale for this derives from the assumption that the adjusted person who has inner control and feels self-assured has no need to be punitive and turn his aggression inwards on himself through inferiority feelings and guilt, nor has he a need to blame others or act out his aggression. It would follow therefore that the more hostile a person is, the more helpless and depressed that person is likely to be.

The fact that hypothesis 2 was confirmed (i.e. depressives show significantly more inward hostility than normals or recovered depressives) also supports Bibring's model of helplessness. Through the mechanism of repression, little energy is available for daily activities. The person feels bored, guilty and is self-abasing, (all of which are forms of inner-directed hostility). This leaves him helpless to change his
emotional state or his environment. The inner-directed person does not turn his hostility inwards and uses his defense mechanisms for the development of the ego.

The fact that hypothesis 3 was not confirmed (subjects who are depressed will differ significantly from normals on perceived locus of control in the direction of less internal control) does not connect with Bibring's model of helplessness. Bibring writes that depressives, due to a loss of self-esteem, feel helplessly exposed to superior powers and the "seemingly inescapable fate of being weak, inferior and a failure". It follows that the depressive cannot experience being in control of either himself, his destiny or his environment. The results obtained do not support either Rotter's or Bibring's theories; this implies that their hypotheses are invalid.

On the other hand, their hypotheses might be valid but the methodology may not have been able to demonstrate this.

The fact that hypothesis 4 was not confirmed (excessive feelings perceived between parents and child are significantly related to adult depression) does not connect with Bibring's theory. Bibring felt that negative experiences in the first years of life would predispose the individual to depression in later years. Loss of self-esteem is seen by him to be due to a lack of love and affection, which in turn causes the individual to feel helpless. The results obtained in this study seem to invalidate Bibring's model of helplessness. It is felt, however, that methodological inadequacies might have obscured the validity of the theory. Possibly the Bone-Anthony Family Relations Test may not have been able to differentiate between family feelings of the depressive and the normal group. Or on the other hand, the response sets of the psychotic and the neurotic depressives might have cancelled out each other's feelings, in that they (and the symptoms) might have been either minimized or exaggerated.
The fact that hypothesis 5 was not confirmed (excessive positive family feelings in childhood contribute significantly to depression later on in life) may possibly connect with Bibring's theory of helplessness. Though Bibring does not discuss the effects of excessive positive feelings on the part of the parents towards the child, it may be argued, within Bibring's framework, that once the child perceives that the excessive feelings cause him to feel weak and insecure, he may become depressed as a result of his helplessness and incapacity to break away from the situation. The results obtained either invalidate Bibring's theory, or the possibility must be kept in mind that Bibring's theory might be valid but that the methodology may have obscured this.

The fact that hypothesis 6 was confirmed (i.e. family feelings in childhood will be the same for depressives and for recovered depressives) supports Bibring's model. It may be argued that the family patterns might have been the reason for the depressive and the recovered group to have felt helpless. The data obtained must be viewed with caution, however, for the results are still not conclusive, since both groups could not be differentiated from the control group.

c. Rotter's social learning theory: Internal-External control.

The fact that hypothesis 1 was confirmed (i.e. depressives show significantly more hostility than normals or recovered depressives) supports Rotter's theory of Internal-External control. It may be argued that, if aggressive impulses are released outwards as a result of threatening forces outside the individual, or inwards upon the self as a result of threat within the individual, that person may be regarded as having little control. The hypothesis supports the theory that the inner-directed and secure person will show aggression only
when this is warranted, and to a much lesser extent.

The fact that hypothesis 2 was confirmed (i.e. depressives show significantly more inward hostility than normals or recovered depressives) also supports Rotter's theory of Internal-External control. The person who uses the mechanism of repression has little energy left and is generally passive. Rotter suggests a relationship between general passivity and the belief in chance or luck. The person who believes in chance is less inner-directed than the person who believes he can control his own destiny. The hypothesis supports the concept that because the depressive has more inward aggression, he is less inner-directed, having little control over his hostility.

The fact that hypothesis 3 was not confirmed (i.e. depressives will differ significantly from normals in perceived locus of control in the direction of less internal control) invalidates Rotter's social learning theory in the case of the depressive. It is important to note that in this theory the internal-external control construct is seen more as an expectancy than as a motivational variable. According to the research, the relationship between the I-E variable and maladjustment has been described as being curvilinear, non-existent or quite complex. As has already been suggested, there is the possibility that the scale is not able to reflect the internality or externality of the depressed versus the non-depressed individual. This does not mean that therefore Rotter's social learning theory is invalidated, only that the methodology might have been inadequate.

The fact that hypothesis 4 was not confirmed (i.e. depressives will perceive significantly more negative feelings in the family in childhood than normals) does not support Rotter's internal-external control theory. In this theory presumably excessive negative feelings
in the form of criticism or rejection may prevent the person from perceiving a causal relationship between his behaviour and the excessive negative feelings. According to Rotter, such a person will feel powerless in his attempts to become competent and autonomous (inner-directed). The data obtained do not confirm this hypothesis. It is assumed that the person may have had validating experiences outside the family, and that the theory does not apply, or that the methodology is unable to validate the theory.

The fact that hypothesis 5 was not confirmed (i.e. depressives will perceive significantly more positive feelings in the family in childhood than normal) invalidates Rotter's theory. Presumably excessive positive feelings in the form of too much affection, over-protection or over-indulgence may prevent that person from perceiving a causal relationship between his behaviour and the positive reward. This will engender less inner-directedness. That this hypothesis was not confirmed by the data may signify that Rotter's hypothesis does not apply here, or if it applies, that the methodology has failed to demonstrate this.

The fact that hypothesis 6 was confirmed (depressives do not differ significantly from recovered depressives in the way they perceive their family relations in childhood) validates Rotter's theory that depressives and recovered depressives have similar family patterns and both groups must be less inner-directed to have become depressed in the first place. The results of the study shed little light on this hypothesis however, for the data could not distinguish between the two groups and the normal group in the way they perceive their family feelings.
CONCLUSIONS

We can now conclude:

1) That the amount of hostility may be seen as a reflection of the depth of depression. These findings support Fould's concept that hostility is a suitable measure of the degree of disturbance. This has implications for diagnosis and treatment. Furthermore, it seems that the H.D.H.Q. is able to differentiate between a depressed and a non-depressed population.

2) Also, the H.D.H.Q. is able to differentiate in the direction of hostility between depressives and non-depressives, with depressives turning their anger inwards. This also has implications for treatment and aids in the assessment of recovery, that is to say, the patient gets better in direct proportion to the degree that he can release his anger outwards.

3) That the Rotter I-E scale was not able to differentiate between depressives and non-depressives on locus of control. It is felt that the items of the Rotter Scale are too far removed from the life of the average person to adequately assess internality or externality. Too many theorists, i.e. Seligman, and Bibring have linked externality with helplessness and depression for the author of this study to dismiss their findings lightly.

4) That the Family Relations Test is not able to differentiate between family feelings of depressives and non-depressives. This may be due to the fact that
   (a) the F.R.T. does not take into account the fact that the older people get, the less emotion they invest in their family of origin, or
   (b) that the response set of the patient plays a role, i.e. maximizing or minimizing feelings, or
   (c) that the sample was biased, or
   (d) that the controls might have been depressed but denied this fact.
4.4. Implications for further research

A research design which would circumvent the difficulties in testing the forementioned hypotheses would have to include other sources so that the study would not be concerned with the subjective feelings of the depressive only. Such a study would include:

1. a self-report measuring instrument assessing depth of depression;
2. a systematic psychiatric interview with at least two raters present;
3. an adequate assessment of inter-rater reliability;
4. a measuring instrument which would be able to differentiate between the family feelings of the depressive and those of the non-depressive;
5. evidence obtained from members of the family, friends and the work situation, regarding depth of depression, internality, etc;
6. separate studies for neurotic and psychotic depressives so that the response sets (i.e., minimization or exaggeration) do not cancel each other out;
7. a measuring instrument measuring obsessionality since obsessional persons, like psychotics, tend to minimize their symptoms.

Such a study would have implications for childrearing practices and would serve as a guideline for the prevention of one of the most common psychiatric conditions, namely depressive illness.


<table>
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Oolay, J., Pichot, P., Lemperiere, T., & Mirouze, R.


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Friedman, A.S.


Friedman, A.S.


Gero, G.

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<th>Author(s)</th>
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APPENDIX
Please tick the circle next to the sentence that describes you most:

A. 0 I do not feel sad
    0 I feel blue or sad
    0 I am blue or sad all the time and I can't snap out of it
    0 I am so sad or unhappy that it is quite painful
    0 I am so sad or unhappy that I can't stand it

B. 0 I am not particularly pessimistic or discouraged about the future
    0 I feel discouraged about the future
    0 I feel I have nothing to look forward to
    0 I feel that I won't ever get over my troubles
    0 I feel that the future is hopeless and that things cannot improve

C. 0 I do not feel like a failure
    0 I feel I have failed more than the average person
    0 I feel I have accomplished very little that is worthwhile or that means anything
    0 As I look back on my life all I can see is a lot of failures
    0 I feel I am a complete failure as a person (parent, child, husband, wife)

D. 0 I am not particularly dissatisfied
    0 I feel bored most of the time
    0 I don't enjoy things the way I used to
    0 I don't get satisfaction out of anything any more
    0 I am dissatisfied with everything

E. 0 I don't feel particularly guilty
    0 I feel bad or unworthy a good part of the time
    0 I feel quite guilty
    0 I feel bad or unworthy practically all the time now
    0 I feel as though I am very bad or worthless

F. 0 I don't feel I am being punished
    0 I have a feeling that something bad may happen to me
    0 I feel I am being punished or will be punished
    0 I feel I deserve to be punished
    0 I want to be punished

G. 0 I don't feel disappointed in myself
    0 I am disappointed in myself
    0 I don't like myself
    0 I am disgusted with myself
    0 I hate myself

H. 0 I don't feel I am any worse than anybody else
    0 I am critical of myself for my weaknesses or mistakes
    0 I blame myself for my faults
    0 I blame myself for everything bad that happens

I. 0 I don't have any thoughts of harming myself
    0 I have thoughts of harming myself but would not carry them out
    0 I feel I would be better off dead
    0 I feel my family would be better off if I were dead
    0 I have definite plans about committing suicide
    0 I would kill myself if I could
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<td>J.</td>
<td>0</td>
<td>I don't cry any more than usual</td>
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<td></td>
<td>0</td>
<td>I cry more now than I used to</td>
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<td></td>
<td>0</td>
<td>I cry all the time now, I can't stop it</td>
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<td></td>
<td>0</td>
<td>I used to be able to cry but I can't cry at all even though I want to</td>
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<td>K.</td>
<td>0</td>
<td>I am no more irritated now than I ever am</td>
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<td>I get annoyed or irritated more easily than I used to</td>
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<td></td>
<td>0</td>
<td>I feel irritated all the time</td>
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<td></td>
<td>0</td>
<td>I don't get irritated at all at the things that used to irritate me</td>
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<td>L.</td>
<td>0</td>
<td>I have not lost interest in other people</td>
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<td></td>
<td>0</td>
<td>I am less interested in other people now than I used to be</td>
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<td>0</td>
<td>I have lost most of my interest in other people and have little feeling for them</td>
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<td>0</td>
<td>I have lost all my interest in other people and don't care about them at all</td>
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<td>M.</td>
<td>0</td>
<td>I make decisions about as well as ever</td>
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<td></td>
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<td>I try to put off making decisions</td>
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<td>I have great difficulty in making decisions</td>
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<td></td>
<td>0</td>
<td>I can't make any decisions at all any more</td>
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<td>N.</td>
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<td>I don't feel I look any worse than I used to</td>
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<td></td>
<td>0</td>
<td>I am worried that I am looking old or unattractive</td>
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<td>0</td>
<td>I feel that there are permanent changes in my appearance and they make me look unattractive</td>
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<td>0</td>
<td>I feel that I am ugly or repulsive looking</td>
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<td>O.</td>
<td>0</td>
<td>I can work about as well as before</td>
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<td></td>
<td>0</td>
<td>It takes extra effort to get started at doing something</td>
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<td>I don't work as well as I used to</td>
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<td>I have to push myself very hard to do anything</td>
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<td></td>
<td>0</td>
<td>I can't do any work at all</td>
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<td>P.</td>
<td>0</td>
<td>I can sleep as well as usual</td>
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<td></td>
<td>0</td>
<td>I wake up more tired in the morning than I used to</td>
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<td></td>
<td>0</td>
<td>I wake up 1-2 hours earlier than usual and find it hard to get back to sleep</td>
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<td>0</td>
<td>I wake up early every day and can't get more than 5 hours sleep</td>
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<td>Q.</td>
<td>0</td>
<td>I don't get any more tired than usual</td>
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<td>I get tired more easily than I used to</td>
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<td></td>
<td>0</td>
<td>I get too tired to do anything</td>
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<td>R.</td>
<td>0</td>
<td>My appetite is no worse than usual</td>
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<td></td>
<td>0</td>
<td>My appetite is not as good as it used to be</td>
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<td></td>
<td>0</td>
<td>My appetite is much worse now</td>
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<td></td>
<td>0</td>
<td>I have no appetite at all any more</td>
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<td>S.</td>
<td>0</td>
<td>I haven't lost much weight, if any, lately</td>
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<td></td>
<td>0</td>
<td>I have lost more than 5 pounds</td>
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<td></td>
<td>0</td>
<td>I have lost more than 10 pounds</td>
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<td></td>
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<td>I have lost more than 15 pounds</td>
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<td>T.</td>
<td>0</td>
<td>I am no more concerned about my health than usual</td>
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<td></td>
<td>0</td>
<td>I am concerned about aches and pains or upset stomach or constipation</td>
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<td></td>
<td>0</td>
<td>I am so concerned with how I feel or what I feel that it is hard to think of much else</td>
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<td></td>
<td>0</td>
<td>I am completely absorbed in what I feel</td>
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I have not noticed any recent change in my interest in sex.

I am less interested in sex than I used to be.

I am much less interested in sex now.

I have lost interest in sex completely.

--ooOoo--
P. AND P.I. QUESTIONNAIRES.

PERSONALITY QUESTIONNAIRE (HDHQ)

by T.M. CAINE

and G.A. FOULDS

SURNAME: ...........................................

CHRISTIAN NAMES: .................................

AGE: .................................................

SEX: ..................................................

OCCUPATION: ......................................

MARITAL STATUS: .................................

DATE: ................................................

Instructions:-
Please fill in this form by putting a circle round the "True" or the "False" after each of the statements overleaf. If you find it difficult to decide, ask yourself whether you think the statement is on the whole true or false and put a circle round the appropriate word.
Remember to answer each statement.

1. Most people make friends because friends are likely to be useful to them. True False
2. I do not blame a person for taking advantage of someone who lays himself open to it. True False
3. I usually expect to succeed in things I do True False
4. I have no enemies who really wish to harm me True False
5. I wish I could get over worrying about things I have said that may have injured other people's feelings. True False
6. I think nearly anyone would tell a lie to keep out of trouble True False
7. I don't blame anyone for trying to grab everything he can get in this world. True False
8. My hardest battles are with myself. True False
9. I know who, apart from myself, is responsible for most of my troubles. True False
10. Some people are so bossy that I feel like doing the opposite of what they request, even though I know they are right. True False
11. Some of my family have habits that bother and annoy me very much. True False
12. I believe my sins are unpardonable. True False
13. I have very few quarrels with members of my family. True False
14. I have often lost out on things because I couldn't make up my mind soon enough. True False
15. I can easily make other people afraid of me, and sometimes do for the fun of it. True False
16. I believe I am a condemned person. True False
17. In school I was sometimes sent to the principal for misbehaving. True False
18. I have at times stood in the way of people who were trying to do something not because it amounted to much but because of the principle of the thing. True False
19. Most people are honest chiefly through fear of being caught. True False
20. Sometimes I enjoy hurting persons I love. True False
21. I have not lived the right kind of life. True False
22. Sometimes I feel as if I must injure either myself or someone else. True False
23. I seem to be about as capable and clever as most others around me. True False
24. I sometimes tease animals. True False
25. I get angry sometimes. True False
26. I am entirely self-confident True False
27. Often I can't understand why I have been so cross and grouchy
28. I shrink from facing a crisis or difficulty
29. I think most people would lie to get ahead
30. I have sometimes felt that difficulties were piling up so high that I could not overcome them.
31. If people had not had it in for me I would have been much more successful
32. I have often found people jealous of my good ideas just because they had not thought of them first.
33. Much of the time I feel as if I have done something wrong or evil
34. I have several times given up doing a thing because I thought too little of my ability.
35. Someone has it in for me.
36. When someone does me a wrong I feel I should pay him back if I can, just for the principle of the thing.
37. I am sure I got a raw deal from life.
38. I believe I am being followed.
39. At times I have a strong urge to do something harmful or shocking
40. I am easily downed in an argument.
41. It is safer to trust nobody.
42. I easily become impatient with people.
43. At times I think I am no good at all.
44. I commonly wonder what hidden reason another person may have for doing something nice for me.
45. I get angry easily and then get over it soon.
46. At times I feel like smashing things.
47. I believe I am being plotted against.
48. I certainly feel useless at times.
49. At times I feel like picking a fist fight with someone
50. Someone has been trying to rob me.
51. I am certainly lacking in self-confidence.

Please check to see that you have given answers for every statement.
I.E. Scale

This is a forced-choice questionnaire. Please choose the alternative you agree with most and circle it, i.e. if you agree with statement 1.a., you circle 1.a.: 

1.a. Children get into trouble because their parents punish them too much.
   b. The trouble with most children nowadays is that their parents are too easy with them.

2.a. Many of the unhappy things in people's lives are partly due to bad luck.
   b. People's misfortunes result from the mistakes they make.

3.a. One of the major reasons why we have wars is because people don't take enough interest in politics.
   b. There will always be wars, no matter how hard people try to prevent them.

4.a. In the long run people get the respect they deserve in this world.
   b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.

5.a. The idea that teachers are unfair to students is nonsense.
   B. Most students don't realize the extent to which their grades are influenced by accidental happenings.

6.a. Without the right breaks one cannot be an effective leader.
   b. Capable people who fail to become leaders have not taken advantage of their opportunities.

7.a. No matter how hard you try some people just don't like you.
   b. People who can't get others to like them don't understand how to get along with others.
8.a. Heredity plays the major role in determining one's personality.
   b. It is one's experiences in life which determine what they're like.

9.a. I have often found that what is going to happen will happen.
   b. Trusting to fate has never turned out.

10.a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
   b. Many times exam questions tend to be so unrelated to course work that studying is really useless.

11.a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
   b. Getting a good job depends mainly on being in the right place at the right time.

12.a. The average citizen can have an influence in government decisions.
   b. This world is run by the few people in power, and there is not much the little guy can do about it.

13.a. When I make plans, I am almost certain that I can make them work.
   b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.

14.a. There are certain people who are just no good.
   b. There is some good in everybody.

15.a. In my case getting what I want has little or nothing to do with luck.
   b. Many times we might just as well decide what to do by flipping a coin.
16 a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
b. Getting people to do the right thing depends on ability, luck has little or nothing to do with it.

17 a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand nor control.
b. By taking an active part in political and social affairs the people can control world events.

18 a. Most people don't realise the extent to which their lives are controlled by accidental happenings.
b. There really is no such thing as "luck".

19 a. One should always be willing to admit mistakes.
b. It is usually best to cover up one's mistakes.

20 a. It is hard to know whether or not a person really likes you.
b. How many friends you have depends upon how nice a person you are.

21 a. In the long run the bad things that happen to us are balanced by the good ones.
b. Most misfortunes are the result of lack of ability, ignorance, laziness or all three.

22 a. With enough effort we can wipe out political corruption.
b. It is difficult for people to have much control over the things politicians do in office.

23 a. Sometimes I can't understand how teachers arrive at the grades they give.
b. There is a direct connection between how hard I study and the grades I get.

24 a. A good leader expects people to decide for themselves what they should do.
24.b. A good leader makes it clear to everybody what their jobs are.

25.a. Many times I feel that I have little influence over the things that happen to me.
   b. It is impossible for me to believe that chance or luck plays an important role in my life.

26.a. People are lonely because they don't try to be friendly.
   b. There's not much use in trying too hard to please people, if they like you they like you.

27.a. There is too much emphasis on athletics in high school.
   b. Team sports are an excellent way to build character.

28.a. What happens to me is my own doing.
   b. Sometimes I feel that I don't have enough control over the direction my life is taking.

29.a. Most of the time I can't understand why politicians behave the way they do.
   b. In the long run the people are responsible for bad government on a national as well as on a local level.

NAME: oooooOOOOOoOO
**BENE-ANTHONY**

**FAMILY RELATIONS TEST**

**SCORING SHEET FOR OLDER CHILDREN**

Name: ................................................... Age: ......................................... Sex: ................................

Name, age, sex of siblings:

1. ................................................. 2. .................................................

3. ................................................. 4. ................................................. 5. ................................................. 6. .................................................

Others in family:

1. ................................................. 2. ................................................. 3. .................................................

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