THEORETICAL CONSTRUCTS

Before undertaking research in any field of social science, it is of paramount importance to underline and explain clearly the concepts underlying the work. Semantic clarifications, definitions, and elaboration of the concepts understudy are an essential element in research. The formulation of hypotheses, statistical analysis of data and interpretation of results is not possible unless the concepts are clear. Therefore, in the following pages an attempt has been made to elaborate upon the conceptual framework of variables included in the present investigation.

DEPRESSION

Depression is a normal experience of human beings and the higher vertebrates and probably is found well down the evolutionary scale. The identification of depression as a recognizable state has a very long history. Clinical depression was described as early as the eighth century in the Biblical descriptions of Saul. During the fourth century B. C., Hippocrates coined the term “melancholy” to describe one of the three forms of mental illness he recognized. Later, Galen attempted to provide a biochemical explanation of melancholy based on theory of ‘humors’. Indeed, repeated descriptions and discussion of depression are present from classical times through the middle ages and into modern times (Beach, 1996).

Abrahman (1911) made the first systematic attempt to explain depressive illness in terms of psychoanalytic theory by comparing depression with normal grief or mourning. He suggested that the crucial differences between grief and depression is that a mourner is consciously
concerned with the lost person, but a depressed patient is dominated by his feeling of loss, guilt, and low self-esteem. For the depressed patient, unconscious feelings of hostility towards the lost person (either real or symbolic) are directed towards himself, as are the deficiencies and weakness he had attributed (usually unconsciously) to the lost person.

In his celebrated paper “Mourning and Melancholia”, Freud (1917/1950) theorized that the potential for depression is created early in childhood. He hypothesized that after the loss of loved one, whether by death or, most commonly for a child, separation or withdrawal of affection, the mourner first introjects or incorporates the lost person; he or she identifies with the lost one, perhaps in a fruitless attempt to undo the loss. Because, Freud asserted, we unconsciously harbor negative feelings towards those we love, the mourner then becomes the object of his or her own hatred and anger. In addition, the mourner resents being deserted and feels guilty for real or imagined sins against the lost person. The period of introjection is followed by a period of mourning, when the mourner recalls memories of the lost one and there by separates himself or herself from the person who has died or disappointed him or her and loosens the bonds imposed by introjection. But grief work can go astray and develop into an ongoing process of self-abuse, self-blame, and depression in overly dependent individual. The mourner’s anger towards the lost one continues to be directed inward.

Kraepelin (1921) gave the following description of the depressed person, “........ the mood is dominated by a profound inward dejection, the patient is hopeless, he is indescribably unhappy, skeptical. Everything is disagreeable, he sees only the dark side of life; the world appears to him aimless, and he feels superfluous. Phobias may occur in simple melancholia, and the patient is tormented with guilt feelings. Energy is virtually absent; the patient has depressive concomitants such as decreased sexual interest, anorexia and weight loss, sleep disturbance with early morning awakening, and psychomotor retardation.”
Rado (1928), considering predispositional factors in depression, stated that the depressive is a person with intense narcissistic needs and precarious self-esteem who, on loss of his love object, reacts first with anger, rebellion and then tries to restore his self-esteem by the punishment of his ego (which includes the introjected bad part of his object) by his super ego.

Lewis (1934) in his classical paper on melancholia defined a depressive state as “a condition in which the clinical picture is dominated by an unpleasant affect, not transitory, without evidence of schizophrenic disorder (other than slight or subordinate) or organic disease of the brain, and in which, moreover, the affective change appears primary, not secondary to other symptoms of ill-health.

Klein (1948) proposed different psychodynamic basis for the development of depression. According to him, the basis for depression is formed during the first year of life. The infant feels frustrated by lack of love and become angry at the mother, developing destructive and sadistic fantasies towards her. The infant is unable to differentiate between the external world (the mother) and internal world (itself and its internal images of the mother) and the fear of destroying the mother becomes, in part a fear of destroying itself. This is the phase that Klein termed as the depressive position.

Alexander’s (1948) view of melancholic as an exaggerated term of mourning may be considered as typical of psychoanalytic’s views. The libido is withdrawn from the outside world because of individual’s ambivalence towards the lost loved one and latent hostility is turned back into the person himself. The loved one can no longer be hated, and this feeling enhanced by guilt, is turned inward exacerbates the suffering.

Bibring (1953) emphasized a loss of self-esteem as the crucial element in depression. His views contrasted with those of the earlier psychoanalytic theorists in that he placed more emphasis on ego
psychology [conscious response to events] than on unconscious conflicts between ego and super ego. He suggested that clinical depression develops primarily as a consequence of frustration of conscious expectations.

Jacobson (1953, 1954) proposed that the loss of self-esteem is the central psychological problem in depression. She postulates the goals of the development of self-esteem, super ego, and ego ideal as the firm establishment of one's own identity, the differentiation of one's self from others, the maintenance of self-esteem and the capacity to form satisfactory object relationships. She considered that “self-esteem represents the degree of discrepancy or harmony between the self-representations, and the wished-for concept of the self.” She regarded all the determinants of self-esteem as having relevance for depression.

Benedek (1956) stressed the importance of the depressive constellations, a term used to describe a psychological state arising from difficulties in the early mother-child relationship. When an infant is not gratified he will become extremely aggressive. While eating he introjects this aggressive impulse and thus, instead of the equation good feeding mother is good satiated self, there develops a state of bad mother equals bad self. Bendek suggests that this constitutes a basis for depression in later life, when appropriate stresses cause regression to this oral phase.

According to Lichtenberg (1957), depression results when a person feels responsible for his hopelessness in regard to the attainment of goals. The author distinguishes three forms of depression, which vary with kinds of goal to which the person directs his expectancy. The three forms of depression correspond to this are neurotic, agitated, or retarded depression.

Hutt and Gibby (1957) describe the depressive states as one that are dominated by lack of self-confidence, by slow movements and speech, and a desire to be away from people. Inactivity apparently results from a feeling that any activity would require too great an effort to be
worthwhile. The individual feels unappreciated, unloved, and unwanted. Life seems utterly hopeless to the patient, who complains about his lack of physical well-being and often suffers from delusion of impending doom. Suicidal thoughts, and often attempts at self destruction, mark the depressed condition.

Arieti (1959) postulated another theory of the development of manic-depressive illness. At some time towards the end of the first year or during second year of life child sees punishment as good, a method whereby he can achieve a behavior pattern that will warrant mother's love. Believing, then, that the absence of parental love is his responsibility he feels guilty, a feeling that leads to the development of a need for still more punishment in the hope that punishment will absolve the guilt and return him to his mother's favor. This developmental pattern leads to rage, resentment and feelings of violent aggression towards the parents. It gives rise to additional guilt feelings, with associated feelings of unworthiness and depression.

Grinker et al. (1961) in factor-analytic study of depression, isolated four factors patterns from the combination of six factors indicative of feelings and concern and ten factors that reflect patient behavior.

A. Feelings: dismal, hopeless, loss of self-esteem, slight guilt feelings.
   Behavior: isolated, withdrawn, apathetic, speech and thinking slowed with some cognitive disturbances.

B. Feelings: hopeless with low self-esteem, considerable guilt feelings, high anxiety.
   Behavior: agitation and clinging demands for attention.

C. Feelings: abandonment and loss of love.
   Behavior: agitated, demanding, hypochondriacal.

D. Feelings: gloom, hopelessness, and anxiety.
   Behavior: demanding, angry, provocative.

The first pattern corresponds fairly well to what is called retarded depression. The second factor sounds much like the order idea of an
agitated depression. The other two patterns are less sharply distinguished. Both entail the typical depressive affects of gloom and hopelessness, described by such term as “demanding”, “angry”, and provocative (White and Watt, 1973).

Hammerman (1962) differentiated between depression in which the role of “sadistic super ego” is prominent and the self-esteem collapses due to guilt in transgressing super ego standards and the depression due to defective ego organization.

Patients who complain of loss of energy and interest, without feeling of sadness, guilt, futility, but with some of other behavioral and somatic accompaniments are considered by many psychiatrics to have ‘masked depression’ (for example Sargant and Dally, 1962; Watts, 1966).

According to Zetzel (1966), psychological maturity consists of passively accepting the limitations of reality and actively working towards realistic goals. Failure in this respect may lead to symptom formation, inhibition, and adaptive failure and may be caused by mechanisms such as projection and denial which prevent the subjective experience of threat, loss and personal limitation. Such failure may also predispose an individual to chronic and psychotic depressions.

Ullman and Krasner (1969) offer a reinforcement theory interpretation of depressive behavior that is thoroughly congruent with socio-psychological view. When the patterns of behavior the person has learned no longer provided reinforcing consequence, the person then emits alternative behaviors. Our culture recognizes a pattern of behavior designated as the depressed role. Because most people respond with kindness to the cues called depressed behavior, there may be immediate reinforcement for emitting such behavior.

One of the first operant theorists to offer a behavioristic interpretation of depression was Ferster (1966, 1973, 1974), who argued that the essential characteristic of depression is the reduction in frequency of behaviors which have been positively reinforced. In other
words, the depressed individual is said to be exhibiting some of the “emotional” patterns exhibited by all organisms when they are on a schedule of “prolonged extinction” (Lewinsohn et al., 1969). It implies that person with many sources of reinforcement is more susceptible to depression than one whose behavior has been maintained by relatively few sources (Lazarus, 1971). These ideas were extended and refined by Lewinsohn (1974) who offers three major hypotheses regarding depression.

1. The depressed person is experiencing a low rate of response-contingent reinforcement. This low rate in turn acts as an unconditioned stimulus for many depressive behaviors (dysphoria, fatigue, somatic problems, etc.).

2. The low rate of response-contingent reinforcement leads to a generally low rate of behavior.

3. The total amount of reinforcement received by an individual is a function of three factors.
   a) The number of activities and events which the person finds reinforcing.
   b) The number and availability of these potential reinforces in the person’s environment.
   c) The extent to which the person possesses the skills necessary to produce the reinforcers.

Feighner et al. (1972) stated that clinical depressive disorder required at least four of the following eight symptoms: (1) a loss of appetite or weight loss, (2) sleeping difficulties including hypersomnia, (3) fatigue, (4) agitation or retardation, (5) loss of interest, (6) difficulty in concentration, (7) feelings of guilt, and (8) thought of suicide or wishing to be dead.

Schuyler (1974) suggested that depression could mean a life style, a temporary reaction to some important event, an enduring symptom or feeling state, or more serious disturbances.
On the basis of the evidence gained from their extensive study, Brown and Harris (1978) constructed a descriptive model of the social causes of depression. The model is presented in a simplified form below.

Vulnerability + Provoking agents \[\rightarrow\] Depression

Factors (in the absence of protective factors)

This study has firmly established that social stress plays a decisive role in triggering many depressive episodes, and it has also demonstrated the fact that social factors may increase an individual's vulnerability to depression.

Bowlby (1980) emphasized the importance of loss or separation in childhood to later development. He thought that separation of a child from his mother or another important figure during early childhood, whether because of illness, travel, or other reasons, created feelings of sadness, anger and continuing anxiety that might affect the person's emotional relationship in adult life.

Seligman (1974) proposed that animals acquire a sense of helplessness when confronted with uncontrolled aversive stimulation. The basic premise of the learned helplessness theory is that an individual's passivity and sense of being unable to act and to control his or her own life is acquired through unpleasant experiences and traumas that the individual tried unsuccessfully to control, bringing in a sense of helplessness which leads to depression.

By 1978, several inadequacies of the theory and unexplained aspects of depression became apparent, and a revised version of the learned helplessness model was proposed by Abramson, Seligman, and Teasdale (1978). Attribution and Learned Helplessness Theory suggests that people become depressed when they attribute negative life events to stable and global causes. The individual prone to depression is thought to show a depressive attributional style, a tendency to attribute bad outcomes to personal, global, stable faults of character. When persons
with this style (a diathesis) have unhappy, adverse experience (stressors) they become depressed (Peterson and Seligman, 1984).

The latest version of the Hopelessness theory (Abramson, Metalsky and Alloy, 1989) has moved even further away from the original formulation. Some forms of depression (hopelessness depressions) are now regarded as caused by a state of hopelessness, an expectation that desirable outcomes will not occur or that undesirable one will occur and that person has no response available to change this situation.

Billings et al. (1983) stated that depressed individuals tend to have sparse social networks. They regard them as providing little support. Reduced social support may lessen an individual's ability to handle negative events and make him or her vulnerable to depression.

Coyne's Interactional Systems Model (Coyne, 1984) suggests that the distress conveyed by those who are depressed elicits supportive behaviors from other people. Other people (especially family members) attempt to reduce the depressed person's aversive displays of distress by ostensibly complying with his or her wishes. However, such responses may disguise hostility, impatience and withdrawal, and despite their attempts at concealing their negative feelings towards the depressed person, it is likely that other people will eventually convey their antagonism and aversion through subtle cues. The depressed person may then respond to signs of rejection by expressing further distress, which is likely to instigate further rejection, so establishing a vicious circle.

A major review (in the form of a 'meta-analytic' study) of the relationship between depression and measures of attributional style was conducted by Sweeney et al. (1986). Their summary analysis of over one hundred studies involving nearly 15000 subjects indicated that the tendency to attribute negative events to internal, stable, and global causes is reliable predictor of depression.
Over the years many attempts have been made to identify different types of depression. The endogenous/non-endogenous distinction began with Kraepelin. Depressions precipitated by biological factors rather than stress, and depressions that are not responsive to environment but that are responsive to somatotherapy, are a few of the conceptual definitions differentiating between endogenous and non-endogenous depressions (Young et al., 1986).

Existential theorists focus on the loss of self-esteem as a central cause of depression. The lost object can be real or symbolic—power, social rank or money but the loss itself is not as important as the change in individual’s self-assessment as the result of the loss. The philosopher Kierkegaard expressed this view of the effects of loss very well in the following quotation, “Despair is never ultimately over the external objects but always over ourselves. A girl loses her sweet heart and she despairs. It is not over the sweet heart, but over herself without sweet heart so it is with all cases of loss, whether loss is not really in itself unbearable. What we cannot bear is being stripped of the external object. We stand denuded and see the intolerable abyss of ourselves” (as quoted by Sarason and Sarason, 1998).

Humanistic theorists such as Rogers (1951, 1980) emphasize that depression is likely to result when the differences between the ideal and the real selves becomes too large for the individual to tolerate. This discrepancy occurs frequently, especially among people who have high aspirations for achievement and try to play several roles simultaneously.

The most important contemporary theory that regards thought processes as causative factors in depression is that of Beck (1967, 1987). His central thesis is that depressed individuals feel as they do because their thinking is geared towards negative interpretations. According to Beck, in childhood and adolescence, depressed individuals acquired a negative schema—a tendency to see the world negatively, through loss of a parent, an unrelenting succession of tragedies, the social rejection of
peers, the criticism of teachers, or the depressive attitude of a parent. These negative schemata of depressed people fuel and are fuelled by certain cognitive biases, which lead these people to misperceive reality. Negative schemata together with cognitive biases or distortions; maintain what Beck called the negative triad: far reaching negative view of self, the world, and the future.

Both, Beck (1983) and Blatt et al. (1982) have outlined personality-event congruency models of depression that suggest that individuals are especially likely to become depressed in response to negative events that are congruent with their predominant personality type. Thus, people high in sociotropy or dependency are especially susceptible to depression following negative interpersonal events, (such as rejection by other people) whereas people high in autonomy or self criticism tend to experience depression following negative achievement or related events, such as academic failure.

According to Hamilton (1989), “The word “depression” is used in three different ways. In common speech, it is used to describe the state of sadness that all persons experience when they lose something of importance to them (e.g., when a near relative dies). In psychiatry, it is used to signify an abnormal mood, akin to the sadness, unhappiness, and misery of everyday experience. Finally, the word “depression” is used for clinical states or disorders (replacing the former “melancholia”) that consists of group of symptoms forming recognizable patterns and sometimes showing a cyclical course, with more or less complete recovery between acute attacks.

Teichman and Teichman (1990) stated that many of the social models of depression emphasize circular causal pattern. Social relationships are held to play an important role in determining the onset of a depressive episode and depression is then seem to have a major impact on social interaction.
Coyne and Downey (1991) suggest that depression may be understood as a failure to cope with ongoing life problems or stressors. It has been hypothesized that coping effectively with problems and stressors can lessen the impact of these problems and help prevent them from becoming chronic.

According to Rehm’s Self-Control Theory, depression arises from deficits in self-monitoring, self-evaluation, and self-reinforcement (Kaslow and Rehm, 1991). Specifically, depression arises when a person selectively monitors the occurrence of negative events to the exclusion of positive events; selectively monitors immediate rather than long-term consequences of actions; sets overly stringent criteria for evaluating actions; makes negative attributions for personal actions; engages in little self-reinforcement for adaptive behaviors; and engages in excessive self-punishment.

Blatt and Zuroff (1992) argue that there are two types of depression associated with two distinct types of early parent-child relationships which engender vulnerability to depression when faced with two distinct types of stresses in later life. A vulnerability to stresses involving loss of attachment relationships is central to one type of depression and this has its roots in early experiences of neglectful or overindulgent parenting. A vulnerability to stresses, loss of autonomy and control is central to the other type of depression and has its roots in early experiences of critical, punitive parenting.

Major depression is defined in the DSM-IV (1994) by the presence of at least five from a list of nine symptoms occurring within the 2 week period, with at least one of the symptoms pertaining to a depressed mood or loss of interest or pleasure. The symptom groups are dysphoria, loss of interest or pleasure, weight loss or weight gain, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue, feelings of worthlessness or excessive guilt, concentration problems, and suicidal ideations or attempts.
Champion and Power (1995) presented a social-cognitive theory of depression, which combines the concepts of mental models, personal goals and social roles. This approach lends itself readily to an account of depression that emphasizes both the psychological and the social levels of vulnerability. It proposes that the depression-prone individual is likely to have a narrow range of valued goals and roles with few other sources of self-worth. The threat to or loss of an over valued goal or role should lead to depression, because no other sources of self-worth are available to the individual.

According to Frude (1998), “there is now clear evidence that changes in levels of certain key neurochemicals can precipitate a depressive episode, and it is equally clear that many cases of clinical depression are triggered by negative events in the person’s life. Family bereavement, divorce, an accident and redundancy from work, for example, all render the individual susceptible to clinical depression.

Dykman (1998) integrated cognitive and motivational factors in depression. The model proposes that people differ in their goal orientation, with some people being more validation seeking (VS) and others being more growth seeking (GS). The model predicts that compared with GS persons, VS persons will show greater anxiety in anticipating of a stressful event and greater self-esteem loss, task disengagement and depression after a negative event.

Abela and Seligman (2000) stated that the attribution will result in depression only if they produce a sense of hopelessness: that is, a belief that the individual has no response available to them that will alter the situation and an expectation that desirable outcomes will not occur.

Family system theories of depression highlight the importance of family-based stress, support, belief systems, and interaction patterns in the etiology and maintenance of depression. Depression may be maintained by particular types of personal and family belief systems, notably those characterized by a perception with past losses, a negative
view of the self as valueless and powerless, and a pessimistic and hopelessness about the future. Depression may be maintained by particular patterns of family interaction, and it is more evident in marital relationships where one partner is depressed (Carr, 2001).

There is consistent evidence that depression is associated with deficits in interpersonal function. There is less support for the position that difficulties in social functioning serve as risk factors for the onset of a first depressive episode, although some investigation have reported that the lack of supportive intimate relationship may leave individuals particularly vulnerable to the effects of life stress (Gotlib and Rottenberg, 2001).

Since, the 1960’s various animal models of depression have produced useful insights into human depression, focusing on new ideas concerning etiology, prevention, and treatment. Some of the earliest and most striking work with primates used a social separation paradigm. Harlow and colleagues in the 1960’s began to study this phenomenon in infant rhesus monkeys, separated from their mothers. Both the monkey and human infants typically go through an initial state of intense agitation and distress (the protest phase - often seen as a prototype of anxiety), followed several days later (if the separation persists) by a phase of despair/depression, characterized by social withdrawal and rejection.

Another influential animal model of depression derives from the learned helplessness phenomenon and theory (e.g. Seligman, 1975). In the late 1960’s, Seligman, Maier, and Overmier noted that laboratory dogs initially exposed to uncontrolled shocks later showed major deficits in learning to control shock in different situations; indeed, they mostly seemed to accept the shock passively rather than trying to escape it. Learned helplessness theory proposed that exposure to uncontrollable events leads one to learn that responses are ineffective in bringing relief, i.e. one is helpless to control important outcomes. Seligman (1975) later proposed that the primary symptoms of depression resembled the
primary changes seen with learned helplessness quite strongly (Mineka, 2001).

Abela and D’ Alessandro (2002) in a prospective study tested the diathesis-stress and causal meditation components of Beck's (1967, 1983) cognitive theory of depression. They concluded that individuals with dysfunctional attributes are likely to show increase in depressed mood following, the occurrence of negative events. The relationship between dysfunctional attributes and increases in depressed mood following the occurrence of negative events is mediated by negative view of the future.

In the present study assessment of depression would be done using Hamilton Depression Rating Scale (Hamilton, 1967).

ANXIETY

The twentieth century has been called the “age of anxiety”, but concern with fear and anxiety are as old as the history of humankind. The concept of fear was clearly represented in ancient Egyptian hieroglyphics; it was also recognized in Greek and Roman literature as a powerful motivator of behavior (Spielberger and Rickman, 1990). Over the years number of views have been put forward to explain the concept of anxiety.

Freud first conceptualized anxiety neurosis in 1895, and this phenomenon has since been studied from many points of view. He theorized that when libidinal excitation produced sexual wishes, fantasies, or experiences that were perceived as threatening, these mental images were repressed. The built up libidinal energy blocked from expression developed into anxiety or somatic symptoms that were anxiety equivalents. He later (1926) enlarged his view to relate anxiety to the
conflict between the ego and the id, between mediation with reality and instinctual drives.

Kierkegaard (1844, 1849) saw “the sickness unto death” as the despair resulting from the loss of self and laid the ground work for the view that anxiety is an inevitable aspect of being alive and neurotic anxiety—the experience of dissolution of the self, nonbeing, and meaningless.

Klein (1932) on the basis of actual analysis of young children felt that anxiety has its origin in fear of death.

Cannon (1932) did pioneering work in the field of homeostasis. Phenomenon in anxiety may be viewed biologically as expression of threats to, temporary failure of, and attempts to restore homeostatic equilibrium on a new level.

Ross (1938) defined anxiety as “a series of symptoms, which arise from faulty adaptations to the stresses and strains of life. It is caused by over action in an attempt to meet these difficulties.”

Simpson (1949) with his view of human evolution, provides a biologic base for thinking about man’s values which are threatened in anxiety.

Sullivan (1946, 53) viewed the human beings as integral part of culture, so that anxiety is seen as arising from a threat to the individual’s security in interpersonal relationships.

Horney (1950) opined that at a very early age we develop an idealized image of ourselves. Our ego thinks of us as something that we really are not, thereby creating a large gap between fantasy and reality. We then have the choice of facing the reality that we are not fulfilling our wishes, needs, and desires or we have to admit to defeat in attempt to satisfy ourselves an anxiety provoking conflict.

Dollard and Miller (1950) consider anxiety to be a powerful secondary drive. Their theory explains as to how anxiety is learned and how it becomes associated with objects and events.
After reviewing a number of theories of anxiety, May (1950) notes that anxiety has the following properties: (i) it is a diffuse apprehension; (ii) it differs from fear in that it is unspecific, vague and objectless; (iii) it is associated with feelings of, uncertainty and helplessness; (iv) it involves a threat to the core or essence of the personality.

Miller (1951), following the lead of psychoanalysis, believes it useful to distinguish fear when its source is vague, or unknown, from fear when its source is known, and to designate the former as anxiety.

According to Rogers (1951), anxiety is experienced when the individual perceives something is a threat to his self-concept. It is assumed that discrepancies between the self, as conceived, and perceptions of reality which cannot be ignored generate tension, and it is this tension which provides the basis for anxiety. Rogers states: “...... if the individual becomes to any degree aware of this tension or discrepancy, he feels anxious, feels that he is not united or integrated that he is unsure of his direction.”

Tillich (1952) defines anxiety as a type of fear resulting from the threat of nothingness or nonbeing. Nonbeing may threaten being (self-affirmation) in three ways: (i) producing anxiety of fate and death (threat to ontic self-affirmation), (ii) producing anxiety of emptiness and meaningless (threat to spiritual self-affirmation) and (iii) producing anxiety of guilt and condemnation (threat to moral self-affirmation).

Goldstein (1952) brought the holistic view of the organism into the field and recognized that “anxiety may be produced by a variety of events, which have one common element- there is always a discrepancy between the individual’s capacities and demands made on him which makes self-realization impossible.”

Basowitz et al. (1955) defined anxiety as “the conscious and reportable experience of intense dread and foreboding, conceptualized as internally derived and unrelated to external threat.”
Laughlin (1956) is of the view that anxiety is the apprehensive tension or uneasiness which stems from the anticipation of imminent danger, in which the source is largely unknown or unrecognized. 

Spence (1956) and Taylor (1956) emphasized the motivational rather than signaling properties of anxiety. The theory of emotionally based drive, advanced by these authors is based on Hull’s basic assumption that the learning factor (H) combines multiplicatively with generalized drive (D) factor to determine excitatory potential (E). Thus E = f (HxD). They further assume that in the conditioning situation, the drive level (D) is a function a magnitude of a hypothetic emotional response (anxiety), aroused by aversive stimuli. 

Weiss and English (1957) define anxiety as specific unpleasurable state of tension which indicates the presence of some danger to the organism. 

Kelman (1957) brings unitary-process thinking into the field of psychiatry. His basic premise being that “organism environment is a single, integral reality” and “........ the patterns of this reality can better be formulated in a language of process. Tension manifested in physical and psychological patterns is one attribute of this hierarchical system. When mean level of tension in this unitary system is exceeded, anxiety becomes manifest.” 

English and English (1958) define anxiety as an unpleasant emotional state in which a present and continuing strong desire or drive seems likely to miss its goal; a fusion of fear with the anticipation of future evil; marked and continuous fear of low intensity; a feeling of threat, especially of a fearsome threat, without the person’s being able to say what he thinks threatens. 

McReynolds (1956, 1960) attributes anxiety to a failure in assimilating percepts. He defined anxiety as “the feeling tone concomitant with a large mass of unassimilated percepts.”
Fromm Reichmann (1960) asserts that anxiety is connected with anticipated fear of punishment and disapproval, withdrawal of love, disruption of interpersonal relationships and isolation and separation. In this context any situation or behavior which is likely to bring punishment on himself is anticipated by the arousal of anxiety.

Krause (1961) concluded that transitory anxiety states are typically inferred from the following types of responses: (a) introspective verbal reports, (b) physiological signs, (c) "molar" behavior (i.e., body posture, restlessness, distortion in speech), (d) task performance, (e) clinical intuition, and (f) the response to stress. Introspective reports according to Krause, provide the most useful and widely accepted basis for defining transitory or state anxiety.

Martin (1961) viewed anxiety reactions as complex neurophysiological responses that must be distinguished conceptually and operationally from the external or internal stimuli that evoke these responses.

Ruebush (1963) stated that anxiety is an unpleasant-feeling state, clearly distinguishable from other emotional states and having physiological concomitants. In addition to this common core of meaning, however, the term takes on other nuances and shadings of meaning depending upon the particular theoretical orientation and operational criteria employed by individual researchers.

Cattell and Scheier (1963) pioneered the application of multivariate techniques to defining and measuring anxiety. Both phenomenological (self-report) and physiological measures of anxiety were included in their factor-analytic investigations of the covariation of different anxiety measures over time (Cattell, 1966b). Relatively independent "state" and "trait" anxiety factors were consistently identified in this research. Measures that fluctuated overtime and co-varied over occasions of measurement had high loadings on the S-anxiety factor, whereas measures with high loadings on the trait anxiety (T-anxiety) factor were
relatively stable over time. Thus, the T-anxiety factor was defined in terms of individual differences in relatively permanent personality characteristics.

For Lindell (1964), anxiety is an outgrowth of the vigilance response. At low magnitude, the vigilance, or “what-is-it”, response serves the adaptive function of bringing the individual into contact with his environment by causing him to attend to changes in stimulation. The response is normally brief, attentive reaction that subsides once the change is evaluated and is found to have no signal value of significance. Should the conditions be such that the vigilance response is maintained over a prolonged period, symptoms of anxiety appear, and experimental neuroses occur.

According to Lazarus (1966), anxiety occurs when there is an appraisal of threat in the absence of locating the source of the threat, so that no clear action tendency is possible. In sum, anxiety occurs when a clear coping impulse has not replaced the primary reaction to threat. As such, ambiguity of threat is the key consideration because it prevents subsequent elaboration of clear action tendencies, even though there may be the impulse to flee or avoid something “unknown”.

Cattell (1966a) offers two definitions of anxiety. The one which he believes is best supported by his data is that anxiety is a function of the magnitude of all unfulfilled needs (or ergs) and the degree of uncertainty that they will be fulfilled, or, more simply stated anxiety corresponds to uncertainty of reward, or of total need fulfillment. The second definition, about which he has some doubt, is that anxiety is specific to the fear erg, and results from the threat that occurs when there is anticipation of deprivation of any or all ergs.

Lewis (1967) views anxiety as an emotion which is usually unpleasant. Subjectively it has the quality of fear or of closely related emotions. Implicit in anxiety is the feeling of impending danger but there
is no recognizable threat or the threat is, by reasonable standards, disproportionate to the emotion it seemingly evokes.

Concepts of state and trait anxiety were refined and elaborated by Spielberger (1966, 1972, 1976, 1977, and 1979) and provided the conceptual framework that guided the test-construction process. State-anxiety was defined as a temporal cross-section in the emotional stream of life of a person, consisting of subjective feelings of tension, apprehension, nervousness and worry and activation (arousal) of the autonomic nervous system (Spielberger et al., 1970). It was assumed that S-anxiety would vary in intensity and fluctuate over time as a function of perceived threat. Trait anxiety was defined in terms of relatively stable individual differences in anxiety-proneness, that is, differences between individuals in the tendency to perceive stressful situations as dangerous or threatening and in the probability that S-anxiety reactions will be manifest in the future. It was further assumed that differences in T-anxiety are reflected in the frequency that anxiety states have been experienced in the past (Spielberger and Rickman, 1990).

Lader and Marks (1971) reported that subjective bodily discomfort occurs during anxiety. There is sense of constriction in the chest, tightness in the throat, difficulty in breathing, epigastric discomfort or pain, palpitations, dizziness and weakness in the legs, and dryness of the mouth. Other bodily disturbances during anxiety are also objectively visible, e.g., running in panic, screaming, tremor, sudden micturition and defecation, swelling or vomiting.

White and Watt (1973) concluded that the diffuseness and indefiniteness of the danger are the most trying features of neurotic anxiety states. The cartoonist Steig (1939) represents this by drawing a little gesticulating demon on the end of a stick attached to the back of person’s head. Whichever way the victim turns, the demon is out there behind him, never in sight. The patient may feel that he is going insane,
that he is trapped amidst dangerous forces, or merely that something indefinitely dreadful is going to happen.

Behaviorist's viewpoint of the symptoms of anxiety and other manifestations of the neurotic is that they are learned, just as anything else is learned by association. They explained anxiety and related neurotic symptoms by tracing the origin of events earlier in life in which individual first associated fear with a certain situation. Since anxiety is accompaniment of fear, anything which resembles the earlier threatening situation will reactivate the anxiety (McMohan, 1976).

Kutash (1980) developed a theory of anxiety which utilized research on both anxiety and stress. Anxiety or a state of disequilibrium occurs when one is not experiencing the optimal level of stress for one's constitution.

Kandel (1983) views anxiety as a normal inborn response either to threat-to one's person, attitudes, or self esteem or to the absence of people or objects that assure and signify safety.

According to the theory that underpins Beck's cognitive approach to therapy for anxiety disorders, anxiety occurs when life events involving threat, reactivate threat-oriented cognitive schemas formed early in childhood during a threatening and stressful experience (Beck et al., 1985).

Generalized anxiety disorder is associated with the number of disturbances in cognitive functioning. In processing simple stimulus information from the environment, for example, GAD clients are hyper vigilant with regard to possible threat (Mathews and Macleod, 1986).

In an extension of the cognitive approach, Barlow (1988, 1991) suggests that anxiety is a cognitive-affective phenomenon, at the core of which lies negative affect. Perceptions of threat are influenced by early experiences with uncontrollability that creates a psychological vulnerability to anxiety by a biological predisposition to experience anxiety in the face of negative life events.
An alternative cognitive model of generalized anxiety disorder was developed by Wells (1995), who proposed that the core feature of GAD was excess worry. He identified two types of worries experienced by people with GAD. Type 1 worries are the typical worries that most of us experience, albeit at an amplified level: worries related to work, social, health and other issues. Type 2 worry or ‘meta-worry’, involves the negative appraisal of one’s own worries. Type 1 worries are relatively common in population samples. Type 2 worries are common in samples of people with GAD.

According to Beck (1997), people who experience high levels of generalized anxiety initially interpret a relatively small number of situations as dangerous and threatening. Over time, they apply these assumptions to more and more situations and develop an increasingly generalized anxiety.

Chorpita and Barlow (1998) found over-protectiveness, excessive punishment or critical comments as a child to be associated with high levels of anxiety in adulthood.

According to Sarason and Sarason (1998), the term anxiety is usually defined “as a diffuse, vague, very unpleasant feeling of fear and apprehension. The anxious person worries a lot, particularly about unknown dangers. In addition the anxious individual shows combinations of following symptoms: rapid heart rate, shortness of breath, diarrhea, loss of appetite, fainting, dizziness, sweating, sleeplessness, frequent urination, and tremors.”

Recent studies have also focused on the relationship between anxiety and catastrophizing (e.g. Vasey and Borkovec 1992; Davey and Levy, 1998). Such studies show that individuals who are chronic worriers tend to engage in a dysfunction catastrophizing sequence. That is, each step at which these individuals worry (e.g. “I may be, short of money this month”) leads to escalating steps of future concern (“I may be unable to pay my rent” or “I’ll end up homeless”).
Riskind et al. (2000) examined the looming maladaptive style (LMS) as a cognitive style that functions as a danger schema to produce specific vulnerability to anxiety, but not to depression. Results provided evidence for the validity of the LMS and indicated that it predicts anxiety and schematic processing of threat over and above the effects of other cognitive appraisals of threat, even in individuals who are currently non anxious.

According to Carr (2001), individuals develop anxiety problems when they are socialized in families where significant family members (particularly primary caretakers) elicit, model and reinforce anxiety-related beliefs and behaviors. Furthermore, family life cycle transitions and stressful life events within the family may precipitate the onset of clinically significant anxiety problems.

According to Steven and Rodin (2001), anxiety occurs when an individual believes that the demands of a situation are greater than their abilities to cope with it. Anxiety may be considered abnormal if it occurs in the absence of what most people would consider to be an adequate stress, or if it is so severe or long-standing that it interferes with day to day life.

Row-Bryne (2001) stated that anxiety is an emotion and state of mind characterized by aversive cognitive (apprehensive expectation of negative experience or consequences), physiologic (autonomic hyperarousal with multiple somatic symptoms such as palpitations, sweating, chest pain, dizziness, diarrhea), and behavioral (hyper vigilance, scanning versus avoidance, paralysis of action, inability to perform) components.

Historically, research on animal models of anxiety especially fears and phobias-began before models of other disorders. The note of classical conditioning in the etiology of specific phobias- first proposed by Watson and Rayner (1920) has been the subject of some controversy since about 1970. However, contemporary research with animal models illustrates
that Pavlov’s and Watson’s core ideas about the role of classical conditioning were sound, but need to be expanded to incorporate the broader knowledge now available about the complexities of conditioning. Animal research by Pavlov and others laid the foundation for showing how individual differences in personality/temperament affect conditioning and the likelihood of acquiring fear and phobias. Work on animals also illustrates a wide range of experiential differences across individuals that strongly affect the outcomes of direct or indirect conditioning experiences (Mineka, 2001).

According to Field (2003) there are two reasons why worry might become uncontrollable in generalized anxiety disorder patients. The GAD patients may use worry as a form of cognitive avoidance, and therefore it becomes self rewarding: the person worries, this worry averts a negative feeling (it may also prevent full access to fear information in memory), and so the person worries more (because worry is rewarded). The second possibility is that patients with GAD try too hard to control their worrying. When people try not to think about things, known as thought suppression (Purdon, 1999), it makes them think about it more and this called rebound effect.

In the present study, assessment of anxiety would be done using the State-Trait Anxiety Inventory (Spielberger et al., 1970).

DEFENSE MECHANISMS

The term ‘defense’ is the earliest representative of the dynamic stand point in the psychoanalytical theory. It appeared for the first time in 1894, in Sigmund Freud’s study “The Defence Neuro-Pychoses” and is employed in this and several of his subsequent works (‘The Etiology of Hystoria’, Further remarks on Defence Neuro-Pychoses) to describe the ego’s struggle against painful or unendurable ideas or affects. Later, this
term was abandoned and, as time passed by, was replaced by that of 'repression'. The relation between the two notions however remained undetermined. In an appendix to Inhibitions, Symptoms, and Anxiety (1926), Freud reverted to the old concept of defense, stating that he thought it would undoubtedly be an advantage to use it again, "provided we employ it explicitly as a general designation for all the techniques which the ego makes use of in conflicts which may lead to neurosis, while we retain the word as "repression" for that special method of defense which the line of approach taken by our investigations made us better acquainted with in the first instance" (Freud, 1937).

Freud (1894) observed, not only that emotion could be 'dislocated or transposed' from ideas (by involuntary mechanisms like dissociation, repression, and intellectualization), but also that emotion could be 'reattached' to other ideas (by the mechanisms of displacement). Later, Freud expanded his theory to suggest that no experience could have a pathogenic effect unless it appeared intolerable to the patient's ego and gave rise to efforts at defense (Freud, 1906/1964).

Over a period of 40 years, Freud described most of the defense mechanisms of which we speak today and identified five of their important properties (a) Defenses are a major means of managing impulse and affect; (b) Defenses are unconscious; (c) Defenses are discrete from one another; (d) Although often the hallmarks of major psychiatric syndromes, defenses are dynamic and reversible; they are states, not traits; (e) Finally, defenses can be adaptive as well as pathological. Freud conceived of a special class of defense mechanism e.g., sublimation-that could transmute conflicting affect not into a source of pathology but into culture and virtue (Freud, 1905/1964).

The first comprehensive study of defense mechanisms was reported by Anna Freud in her landmark work, The Ego and the Mechanisms of Defence (1937). Anna Freud expanded her father's work by providing detailed descriptions of a number of individual defense
mechanisms, including regression, reaction formation, undoing, introjections, identification, projection, turning against the self, reversal, and sublimation. She pointed out that everyone uses a characteristic repertoire of defense mechanisms that are intimately related to that person's character (Gabbard, 1995). She classified various defense mechanisms according to the specific anxiety-situations which call them into action (Freud, 1937).

Hartman (1939) has described how the ego develops and maintains itself to promote biological adaptation.

Eissler (1953) stated that if unchecked, the primary defenses or resistances tend to extend their spheres of influence; as this expansion would ultimately cripple the ego, the ego develops secondary resistances to avoid this consequence. Then there are secondary resistances that account for the dynamically unconscious status of the defense mechanisms.

Hall (1954) is of the view that defense tie up psychological energy which could be used for more effective ego activities. When a defense becomes very powerful, it dominates the ego and curtails its flexibility and its adaptability. Finally, if the defenses fail to hold, the ego has nothing to fall back upon and is overwhelmed by anxiety.

According to Gill (1963), "defence mechanisms are a theoretical abstraction of a way of working of the mind, which of course cannot become conscious."

Schafer (1968) describes a hypothetical baseline condition of ideas, feelings, and impulses. This condition is that the idea or the feeling or the impulse be freely available to conscious thought. Free availability is indicated by the ease, clarity, constancy, appropriateness, and lack of distortion with which a mental content may be represented consciously. Deviations from this hypothetical baseline condition are classifiable in terms of the mechanisms of defense: thus if the content is simply excluded from conscious representation, we speak of repression; if it is...
conscious but located in another person, we speak of projection; if it is disguised as a developmentally earlier form of ideation, feeling or impulse, we speak of regression; and so forth.

Laplanche and Pontalis (1973) defined defense mechanisms as follows, “Different types of operations through which defence may be given specific expression. Which of these mechanisms predominate in a given case depends upon the type of illness under consideration, upon the developmental stage reached, upon the extent to which the defensive conflict has been worked out, and so on.”

White and Gilliland (1975) stated that the term mechanisms of defense refers to the various automatic, involuntary, and unconsciously instituted psychological activities by which the human being attempts to exclude unacceptable urges or impulses from awareness. By excluding the urge from awareness, he removes it one step further from the likelihood of expression- after all, the thought is said to be the father of the deed.

Haan (1977) distinguished coping, defense, fragmentation from one another by a set of formal properties. Coping involves purpose, choice, and flexible shift adheres to inter-subjective reality and logic, and allows and enhances proportionate affective expression; defensiveness is compelled, negating, rigid, distorting of inter-subjective reality and logic, allows covert impulse expression, and embodies the expectancy that anxiety can be relieved without directly addressing the problem; fragmentation is automated, ritualistic, privatistically formulated, affectively directed, and irrationally expressed in the sense that inter-subjective reality is clearly violated.

Brenner (1981) states that defense is an aspect of mental functioning that is definable only in terms of its consequences: the reduction of displeasure associated with a drive derivative i.e. with an instinctual wish, or with super-ego functioning.
According to American Psychiatric Association (1994), “defense mechanisms are patterns of feelings, thoughts, or behaviors that are relatively involuntary. They arise in response to perceptions of psychic danger or conflict, to unexpected change in the internal or external environment, or in response to cognitive dissonance.”

Holmes (1994) discussed three points that should be recognized concerning the defenses in general. First, defense mechanisms are used to avoid or reduce negative emotional states (i.e. conflict, frustration, anxiety). Second, most defense mechanisms involve a distortion of reality. Depending on which defense mechanism is being used, a person might ignore feelings or aspects of the environment (repression, suppression, denial), erroneously attribute traits or characteristics to other persons which they do not have (projection), or express a feeling towards one person which really should be expressed towards another (displacement). Third, persons are usually not consciously aware of their use of most defense mechanisms.

Defense mechanisms can alter our perception of any or all of the following: subject (self), object (other person), idea or emotion. In addition, defenses dampen awareness of and response to sudden changes in reality, emotions and desires, conscience, and relationships with people. As in the case of physiological homeostasis, but in contrast to so-called coping strategies, defense mechanisms are usually deployed outside of awareness. (Valliant, 2001).

**Taxonomy of Defense Mechanisms**

It is possible to list the defenses employed by the ego according to a variety of classifications. Defenses may be classified developmentally that is, in terms of the libidinal phase in which they arise. Denial, projection, and reality distortion could be assigned to the oral phase of development, and to the narcissistic stage of object relationships (Mack and Semrand, 1967). According to Anna Freud (1965), defenses have
their own chronology, even if only an approximate one. They are more apt to have pathological results if they come into use before the appropriate age or are kept up too long after it. Examples are denial and projection, which are “normal” in early childhood and lead to pathology in later years; or repression and reaction formation, which cripple the child’s personality if used too early.

The defenses have also been classified on the basis of the particular form of psychopathology with which they are commonly associated. Freud (1937) pointed that in a particular mental disorder there is a specific preponderance of certain defenses, e.g., repression in hysteria; repression and regression, undoing and isolation in obsessive-compulsive neurosis and projection in paranoid disorders.

The defenses have been classified according to whether they are simple (i.e., basic) mechanisms or complex (in which event a single defense would involve a combination, or composite of “simple” mechanisms) (Mack and Semrand, 1967).

Many workers of ego psychology tried to classify defenses on a hierarchical continuum. Sigmund Freud (1915) speculated about such a possibility but over 20 years later, Anna Freud confessed that “the chronology of psychic processes (defenses) is still one of the most obscure fields of analytical theory”. In 1955, Brenner observed that the wish to establish a chronology of defenses “which seems like such a stimulating one, has not so far been followed up”. Engel (1962) published a formal developmental hierarchy of the defenses. Menninger (1963) arranged them in a hierarchy of increasing psychopathological abnormality. Unfortunately hierarchy was not subjected to clinical validation.

Semrand et al. (1973) proposed a hierarchy of ego functioning, specifically with regard to defense styles.

Valliant (1971) classified the defenses into narcissistic, immature, neurotic, and mature. Narcissistic defenses included psychotic denial,
delusional projection, and distortion. Immature defenses included fantasy, projection, passive aggression, hypochondriasis, and acting out. Neurotic defenses included intellectualization, repression, displacement, reaction formation, and dissociation. Mature defenses included sublimation, suppression, anticipation, altruism, and humor.

Haan (1977) described 20 ego processes with explicit definitions. She divided these styles into two groups of 10 each, described as coping (healthy) and defending (pathological). She validated her scheme by correlating her results with important individually derived measures of mental health.

Bond et al. (1983) developed a self administered questionnaire and after factor analysis came to the conclusion that the defenses could be clubbed into distinct four defense styles. They named these four defense styles as maladaptive action defense style, image-distorting defense style, self-sacrificing defense style, and adaptive defense style.

1. Maladaptive action defense style: This defense style included defenses like withdrawal, acting out, regression, inhibition, passive aggression, and projection. These entire defenses indicated the persons’ inability to deal with their impulses by taking constructive action on their own behalf. The acting out subject requires control. The withdrawn or inhibited person needs to be actively drawn out. The passive-aggressive person acts to provoke the anger in the person with whom he is involved. The regressed person requires someone to take over and do something for him. The projecting person puts the blame and responsibility on others instead of accepting his or her own impulses.

2. Image-distorting defense styles: This defense style included defenses like splitting, primitive idealization, and omnipotence with devaluation. The essence of these defenses is to split the image of self and other into good and bad and strong and weak. This differs from the style 1 defenses in that it is image oriented rather than action oriented.
3. Self-sacrificing defense style: This defense style included defenses like reaction formation and pseudo-altruism. The item designed to test these defenses reflect a need to perceive one's self as being kind, helpful to others and never angry. This is characteristic of martyr types and “do gooders”.

4. Adaptive defense style: This style included defenses like humor, suppression, and sublimation. These are clearly associated with good coping. Suppression allows for an anxiety-producing conflict to be put out of awareness until one is ready to deal with the issue. Humor reflects a capacity to accept the situation while taking the edge off the painful aspects of it. Sublimation uses the anxiety-provoking impulses in the service of a creative response.

Perry and Copper (1985) developed a different schema to classify the defenses into defense summary scales. They listed six defense summary scales, namely disavowal, action, borderline, narcissistic, obsessional, and mature summary scales.

The most recent American diagnostic manual (American Psychiatric Association, 1994) provides a glossary of consensually validated definitions and arranges defense mechanisms into several general classes of relative psychopathology. The seven defense levels are defensive deregulation, action, major image-distorting, disavowal, minor image-distorting level, mental inhibitions, and high-adaptive.

Over the years number have investigators have worked on Defense Style Questionnaire. Flannery and Perry (1990) compared 14-defense and 20-defense version of the self-reported Bond Defense Style Questionnaire in a non clinical sample of adults. They found that immature defenses were highly associated with higher reported levels of life stress, physical illness, and affective symptoms. The Bond questionnaire appeared to be an additional helpful tool in consultation-liaison psychiatry for identifying poor copers at high risk for distress.
Steiner and Feldman (1995) stated that measurement of adaptive style by the Defense Style Questionnaire may be a useful adjunct to other measures of psychopathology and can assist in assessment of risk, treatment planning, and treatment progress.

Paris et al. (1996) studied the defense styles, hostility, and psychological risk factors in male patients with personality disorders. They found that in men with personality disorders, immature defense styles and high levels of hostility are strongly associated with a borderline diagnosis.

Tordjman et al. (1997) compared the defense styles of anorexic, bulimic, and normal females using the Bond Defense Style Questionnaire. Data showed significant differences of psychological functioning between control subjects and eating disorder subjects, particularly for the projection, undoing, and sublimation defenses. Anorexics differed from the bulimic females only on the passive aggression, isolation and devaluation defenses.

Watson and Sinha (1998) studied gender, age, and cultural differences in the Defense Style Questionnaire-40. They noted some interesting differences for gender on the suppression, pseudoaltruism, and isolation scales. The internal structure of defense styles was found to have similarities and differences for males and females with the DSQ-40.

Pellitteri (2002) studied the relationship between emotional intelligence and ego defense mechanisms. Results showed that the adaptive defense style was correlated with overall emotional intelligence but not with the emotional perception and regulation components, as was hypothesized. Emotional knowledge was correlated with both adaptive and maladaptive defense style and with general intelligence, as was expected.

Bullitt and Farber (2002) studied sex differences in the relationship between interpersonal problems and defensive style. Women were more
likely than men to employ immature defenses when dealing with issues of “control” in intimate relationships while men were more likely to employ intermediate defenses in response to problems with “intimacy” in work relationships.

Bond (2004) stated that Defense Style Questionnaire (DSQ) is a widely used self-report measure of empirically derived groupings of defense mechanisms ranked on an adaptive hierarchy. A review of published studies indicates strong evidence that adaptiveness of defense style correlates with mental health and that some diagnoses are correlated with specific defense patterns—e.g., borderline personality disorder with greater use of both maladaptive and image-distorting defenses and less use of adaptive defenses.

Over the years authors have listed number of defense mechanisms and described them. Sigmund Freud (1926) listed introjection, turning against the self and reversal. Anna Freud (1937) described sublimation, displacement, denial in fantasy, denial in word and act, identification with the aggressor and altruism. Kernberg (1976) and Klein (1973) described splitting, omnipotence with devaluation, primitive idealization, projective, identification, and psychotic denial. Valliant (1976) added to the list of defenses fantasy, passive aggression, hypochondraisis, acting out, suppression, humor, and anticipation. Descriptions of the various defense mechanisms listed by different authors are given below:

**Regression:** Attempting to return to an earlier libidinal phase of functioning to avoid the tension and conflict evoked at the present level of development. It reflects the basic tendency to gain instinctual gratification at a less-developed period. Regression is a normal phenomenon as well, as a certain amount of regression is essential for relaxation, sleep, and orgasm in sexual intercourse. Regression is also considered an essential concomitant of the creative process (Gabbard, 1995).
Somatization: Converting psychic derivates into bodily symptoms and tending to react with somatic manifestations, rather than psychic manifestations. In desomatization, infantile somatic responses are replaced by thought and affect; in resomatization, the person regresses to earlier somatic forms in the face of unresolved conflicts (Gabbard, 1995).

Inhibition: Consciously limiting or renouncing some ego functions, alone or in combination, to evade anxiety arising out of conflict with instinctual impulses, the superego or environmental forces or figures (Gabbard, 1995).

Primitive Idealization: In the defense of primitive idealization, the subject describes real or alleged relationships to others (including institutions, belief systems, etc) that are powerful, revered, important, etc. This usually serves as a source of gratification as well as protection from feelings of powerlessness, unimportance, worthlessness, and the like. The defense accomplishes a sort of alchemy of worthiness by association (Perry and Cooper, 1986).

Glossary of Specific Defense Mechanisms and Coping Styles (DSM IV, 1994)

Acting out: The individual deals with emotional conflict or internal or external stressors by actions rather than reflections or feelings. This definition is broader than the original concept of the acting out of transference feelings or wishes during psychotherapy and is intended to include behavior arising both within and outside the transference relationship. Defensive acting out is not synonymous with “bad behavior” because it requires evidence that the behavior is related to emotional conflicts.

Affiliation: The individual deals with emotional conflict or internal or external stressors by turning to others for help or support. This involves sharing problems with others but does not imply trying to make someone else responsible for them.
**Altruism:** The individual deals with emotional conflict or internal or external stressors by dedication to meeting the needs of others. Unlike the self-sacrifice sometimes characteristic of reaction formation, the individual receives gratification either vicariously or from the response of others.

**Anticipation:** The individual deals with emotional conflict or internal or external stressors by experiencing emotional reactions in advance of, or anticipating consequences of, possible future events and considering realistic, alternative responses or solutions.

**Autistic fantasy:** The individual deals with emotional conflict or internal or external stressors by excessive daydreaming as a substitute for human relationships, more effective action, or problem solving.

**Denial:** The individual deals with emotional conflict or internal or external stressors by refusing to acknowledge some painful aspect of external reality or subjective experience that would be apparent to others. The term “psychotic denial” is used when there is gross impairment in reality testing.

**Devaluation:** The individual deals with emotional conflict or internal or external stressors by attributing exaggerated negative qualities to self or others.

**Displacement:** The individual deals with emotional conflict or internal or external stressors by transferring a feeling about, or a response to, one object onto another (usually less threatening) substitute object.

**Dissociation:** The individual deals with emotional conflict or internal or external stressors with a breakdown in the usually integrated functions of consciousness, memory, perception of self or the environment, or sensory-motor behavior.

**Help-rejecting complaining:** The individual deals with emotional conflict or internal or external stressors by complaining or making repetitious requests for help that disguise covert feelings of hostility or reproach toward others, which are then expressed by rejecting the
suggestions, advice, or help that others offer. The complaints or requests may involve physical or psychological symptoms or life problems.

**Humor:** The individual deals with emotional conflict or external stressors by emphasizing the amusing or ironic aspects of the conflict or stressor.

**Idealization:** The individual deals with emotional conflict or internal or external stressors by attributing exaggerated positive qualities to others.

**Intellectualization:** The individual deals with emotional conflict or internal or external stressors by the excessive use of abstract thinking or the making of generalizations to control or minimize disturbing feelings.

**Isolation of affect:** The individual deals with emotional conflict or internal or external stressors by the separation of ideas from the feelings originally associated with them. The individual loses touch with the feelings associated with a given idea (e.g., a traumatic event) while remaining aware of the cognitive elements of it (e.g., descriptive details).

**Omnipotence:** The individual deals with emotional conflict or internal or external stressors by feeling or acting as if he or she possesses special powers or abilities and is superior to others.

**Passive aggression:** The individual deals with emotional conflict internal or external stressors by indirectly and unassertively expressing aggression towards others. There is a facade of overt compliance masking covert resistance, resentment, or hostility. Passive aggression often occurs in response to demands for independent action or performance or the lack of gratification of dependent wishes but may be adaptive for individuals in subordinate positions who have no other way to express assertiveness more overtly.

**Projection:** The individual deals with emotional conflict or deals with internal or external stressors by falsely attributing to another his or her own unacceptable feelings, impulses, or thoughts.

**Projective identification:** As in projection, the individual deals with emotional conflict or internal or external stressors by falsely attributing to another his or her own unacceptable feelings, impulses, or thoughts.
Unlike simple projection, the individual does not fully disavow what is projected. Instead, the individual remains aware of his or her own affects or impulses but misattributes them as justifiable reactions to the other person. Not infrequently, the individual induces the very feelings in others that were first mistakenly believed to be there, making it difficult to clarify who did what to whom first.

**Rationalization:** The individual deals with emotional conflict or internal or external stressors by concealing the true motivations for his or her own thoughts, actions, or feelings through the collaboration of reassuring or self-serving but incorrect explanations.

**Reaction formation:** The individual deals with emotional conflict or internal or external stressors by substituting behavior, thoughts or feelings that are diametrically opposed to his or her own unacceptable thoughts or feelings usually occurs in conjunction with the repression.

**Repression:** The individual deals with emotional conflict or internal or external stressors by expelling disturbing wishes, thoughts, or experiences from conscious awareness. The feeling component may remain conscious, detached from its associated ideas.

**Self-assertion:** The individual deals with emotional conflict or stressors by expressing his or her feelings and thoughts directly in a way that is coercive or manipulative.

**Self-observation:** The individual deals with emotional conflict or stressors by reflecting on his or her own thoughts, feelings, motivation and behavior, and responding appropriately.

**Splitting:** The individual deals with emotional conflict or internal or external stressors by compartmentalizing opposite affect states and failing to integrate the positive and negative qualities of the self or other into cohesive images. Because ambivalent affect cannot be experienced simultaneously, more balanced views and expectations of self or others are excluded from emotional awareness. Self and object images tend to alternate between polar opposites: exclusively loving, powerful, worthy,
nurturing, and kind-or exclusively bad, hateful, angry, destructive, rejecting, or worthless.

**Sublimation:** The individual deals with emotional conflict or internal or external stressors by channeling potentially maladaptive feelings or impulses into socially acceptable behavior (e.g. contacts, sports to channel angry impulses).

**Suppression:** The individual deals with emotional conflict or internal or external stressors by intentionally avoiding thinking about disturbing problems, wishes, feelings, or experiences.

**Undoing:** The individual deals with emotional conflicts or internal or external stressors by words or behavior designed to negate or to make amends symbolically for unacceptable thoughts, feelings, or actions.

For the purpose of the current study, an assessment of defense mechanisms will be done using Defense Style Questionnaire (Bond, 1986).

**RIGIDITY**

Rigidity is one of the oldest psychological constructs, with systematic research dating back to the late 19th century. Many terms in psychology refer to rigidity, including perseveration, conservatism, dogmatism, anality, intolerance of ambiguity and compulsiveness. Terms such as flexibility, lability, tolerance of ambiguity, and, to some degree creativity have served as labels for tendencies contrasted with rigidity (Gorman, 1994). Kline (2000) is of the view that rigidity refers to two aspects of individual differences-personality and ability-that are usually regarded as separate.

Freud with his concept of fixation and Adler with his concept of style of life have described behavior, which appears to be consistently inappropriate to a present set of cues or at least is responsive only to a
very limited set of cues in a variety of situations (Schroder and Rotter, 1970).

Spearman (1927) described rigidity as “mental inertia”. Spearman is widely known for introducing the g factor, but it is not widely known that he also proposed a p factor (perseveration factor). According to Spearman, g consisted of the amount of mental energy available and p was the inertia of this energy.

For Lewin (1933), rigidity was a central construct. It was defined as “the state of the boundaries between psychological regions.” Kounin (1941) has applied Lewin’s rigidity construct to the feeble minded.

Goldstein (1943) viewed rigidity as adherence to a present performance in an inadequate way. Werner (1946) defined rigidity as lack of variability in response.

Rokeach (1948) defined rigidity as “inability to restructure a field in which there are alternative solutions to problem in order to solve that problem more efficiently.” He further suggested that there is a generalized rigidity which will, “manifest itself in the solution of any problem, be it is social or non-social in nature.”

Cowen and Thompson (1951) suggest rigidity may, to some extent, “be deduced from higher order construct in personality organization” and it may, to some extent, “be a- culturally induced factor.”

Buss (1952) stated that “rigidity is resistance to shifting from old to new discriminations.”

Phillips and Gibson (1957) state that, “something that is rigid is firm, unbending, stiff, and inflexible. The person who has to do everything exactly the same way each time he does it is a rigid person in that respect. The rigid person will very likely go through the same routine in the same rigid way when he performs such chores as going to bed, getting up, putting on or taking off the clothes and eating. If he is forced to do something different from what is customary for him, he will be made restless, angry, and resentful. He finds security and comfort in
identical repetition of a thing. Also, he lacks spontaneity and cannot “let his hair down” and have fun. He is too prim, and proper. He often makes others uncomfortable because his manner is so stiff.”

Chown (1959) in a review article, “Rigidity-A flexible concept”, stated that “rigidity has been used to describe behaviors characterized by the inability to change habits, sets, attitudes, and discriminations.” Her article focused on definitions of rigidity, rigidity tests, and experimental work involving rigidity. She concluded with three generalizations. First, she noted that a variety of instruments were available for measuring rigidity and that their commonalities were unclear. Second, she advocated a return to a physical model of rigidity, in which rigidity is defined as the ratio of environmental stress to structural strain. Finally, she noted that the empirical evidence suggested a multidimensional construct, but that little research has been conducted to identify the different aspects of rigidity (Schultz and Searleman, 2002).

Another theme noted by Chown was the distinction between the functional and structural approaches to rigidity, a distinction articulated in earlier articles by Kounin (1948) and Werner (1946). The structural approach viewed rigidity in terms of the amount of differentiation between “mental regions”. A person with highly defined and distinct regions was rigid; while a person with less clearly defined mental regions (i.e. more overlap between regions) was not rigid. A functional view of rigidity in contrast, viewed it not as a tool for organizing information, but as a way of using information to solve problems (Schultz and Searleman, 2002).

Rokeach (1960) in his book “The Open and Closed Mind” defined rigidity as a resistance to change in beliefs, attitudes or personal habits.

Pervin (1960) used following definition of rigidity in his study, “Rigidity is the inability to shift set or response when the conditions of the situation require it i.e., when the existing set or responses are no longer rewarding.”
According to Gordon (1963), “rigidity refers to a resistance to change in behavior and/or to change the environment which might, through the presence of new cues, elicit behaviors in the individual which represents a change from previous behavior. Such rigidity is manifested in stereotyped responding, even when the response is patently inappropriate, in a resistance to changing one’s “set”, or attitude, to changing plans on short notice, to breaking routine, to trying new ways of doing things, or to allowing others to change accustomed feature of the environment.”

Schaie and Praham (1975) defined rigidity as “the tendency to perseverate and resist the acquisition of new behavior patterns by holding onto previous and non adaptive styles of performance.” They suggested that rigidity is a multidimensional factor, with one component reflecting attitudinal flexibility, the ability to perceive and adjust to new and unfamiliar surroundings and situations. The second component to rigidity is called psychomotor speed, a person’s rate of responses that are efficient in coping with situations that require rapid response and quick thinking. The third component is called motor-cognitive rigidity, a person’s ability to shift without difficulty from one activity to another with continuously changing situational demands.

Number of studies conducted over the years showed that rigidity is not a general personality trait and that different measures of rigidity measure different kinds of rigidity. Applezweig (1954) concluded that there is no general factor of rigidity. Wolpert (1955) found that his subjects failed to exhibit consistent rigidity scores on the different tasks. Schaie (1955) rejected a single rigidity factor and describes it as (1) motor-cognitive speed, (2) personality-perceptual rigidity and (3) motor-cognitive rigidity. Pervin (1960) also suggested that rigidity is not a general personality characteristic, since individuals may be rigid in one area of personality functioning and not in another. Eysenck (1960) observed that there was no single generalized trait of rigidity. Muhar
(1974) found amongst the Indian student population, a lack of significant inter-correlation among six measures of rigidity.

Goldenson (1984) stated that rigidity in psychiatry is a personality trait characterized by inability or strong resistance to changing one's behavior, or to altering one's opinions and attitudes. In physiology, rigidity is a condition of extreme and persistent muscular contraction, as in certain neuromuscular disorders such as cerebral palsy.

Coleman (1988) viewed rigidity as a tendency to follow established coping patterns, with failure to see alternatives or extreme difficulty in changing one's established patterns.

Rigidity is an aspect of authoritarian personality studied by Adorno et al. (1950). The authoritarian personality holds rigid, unchangeable, conventional views concerning the organization of society that it is best divided into clear hierarchies that leaders are to be obeyed, that old wisdom is best, and that modern liberal permissiveness is the road to ruin. Authoritarians prosper in the hierarchy of the armed forces or occupations with clear-cut roles (Kline, 2000). Bryne (1974) is of the view that authoritarians are expected to be more rigid in their behavior and more resistant to change than are equalitarians.

Rokeach (1960) delineated dogmatism which is somewhat similar to rigidity. However, Rokeach (1956) distinguished dogmatism from rigidity. Dogmatism refers to closed systems of sets or beliefs and rigidity refers to single sets or beliefs which resist change.

McCrae (1996) has emphasized the importance of openness to experience, which is essentially low rigidity. He has claimed, based entirely on empirical, atheoretical attempts to measure personality by questionnaire, that openness is one of the five pervasive personality factors (the other being extraversion, anxiety, agreeableness, and conscientiousness). He admits that his concept is allied to authoritarianism and dogmatism, and he further characterizes it as related to intolerance of ambiguity and ethnocentrism, the latter being an
important aspect of authoritarianism. This work paints a vivid picture of the rigid personality as conservative, conventional, dogmatic, rule bound, ethnocentric, and obsessive.

Hurlock (1976) stated that rigidity is a defense against anxiety arising from insecurity. To compensate, the individual uses various defense mechanisms and, therefore, behaves rigidly in any situation in which stress appears.

In the rigid personality syndrome are such traits as conservatism, inhibition, intolerance of disorder and ambiguity, resistance to change, social introversion, anxiety, and marked feelings of guilt (Schaie, 1958; Rehfisch, 1958; Goins, 1962). Kiesler (1988) stated that a maladjusted person consistently broadcasts a rigid and extreme self-presentation and simultaneously pulls for a rigid and constricted relationship from others. The individual imposes a rigid program on transactions, a program he or she is unwilling or unable to modify, despite the initially varying interpersonal stances of others.

Rigidity is also a characteristic of neurosis. Pervin (1960) studied rigidity in neuroses and general personality functioning. His results appear to be consistent with and support the clinical observations that rigidity is a characteristic of neuroses. Neurotics may be more rigid than a normal, in one or more areas of personality functioning, but not necessarily in all. Kutash (1965) stated that practically all authorities on neuroses agree that rigidity or lack of flexibility is a definitely identifiable characteristic of psychoneuroses: that the neurotic tends to repeat his difficulties over and over, seemingly not learning by experience. Pervin (1960) is of the view that rigidity is useful to the neurotic; it assists him in coping with new and ambiguous situations which would otherwise challenge his doubtful ability to cope with the environment.

Rigidity is also part of the clinical syndrome of obsessionality. Shapiro (1965) noted that obsessive-compulsive persons take a rigid approach to action and reaction in life. The rigidity may take the form of
persisting in the pursuit of a course of action that is absurd, a stiff formal social compartment, or a dogmatic and opinionated style of thinking.

Shapiro (1976) states that, “the term rigidity is used very frequently to describe obsessive-compulsive people, refers to a number of characteristics. It may refer, for example to a stiff body posture or social manner, or to a general behavioral quality of persistence in a course of action that is irrelevant, or even absurd. But, above all, this term describes a style of thinking”.

Coleman (1988) describes obsessive-compulsive personality as the behavior pattern in which individual manifests excessive concern with conformity and rigid adherence to standards of conscience. Such an individual tends to be over inhibited, over conscientious, over dutiful, rigid, and has difficulty relaxing. This disorder is a milder version of obsessive-compulsive neuroses, to which it may actually lead.

Perry and Vaillant (1989) state that the essential features of obsessive-compulsive personality disorder are emotional constriction, orderliness, perseverance, indecisiveness, and rigidity.

Rigidity and stubbornness are one of the diagnostic criteria of obsessive-compulsive personality disorder (DSM -IV, 1994).

Schultz and Searleman (2002) described rigidity as a multidimensional construct encompassing the tendency to form and perseverate in the use of mental and behavioral sets. A series of meta-analysis were performed based on three measures of behavioral rigidity: the Einstellung Water-Jar Task, the Wisconsin Card Sorting Task, and the motor-cognitive dimensions of the Test of Behavioral Rigidity. The results indicated that rigidity is curvilinearly related to age, positively related to authoritarianism (particularly under stressful situations), and negatively related to intelligence; that men are more rigid than women; that obsessive-compulsiveness is positively related to rigidity; and that
schizophrenics are more rigid than non schizophrenic siblings and normal controls.

**ORDERLINESS**

Orderliness as a personality trait has been studied by number of psychologists over the years. According to Murray (1938), “orderliness means to put things in order, to achieve cleanliness, arrangement, organization, balance, neatness, tidiness, and precision.” Actions of the orderly person are predominantly to be neat and clean in one's personal appearance. To sit and move about in an orderly, restrained manner, to arrange work, dust off the table, put things in their place, to have a special place for everything. To straighten things. To write neatly in a straight line, erase, keep papers clean, copy a page if it is untidy. To keep accounts. To be exact and precise in speech, in transactions with others. To be scrupulous. To aim perfection in details. To keep a room in order, to sweep, dust, polish, to hang pictures straight, to arrange the furniture, mow the lawn, cut the hedge, rake the path, and throwaway rubbish.

Murray (1938) described n Order as one of his twenty manifest needs. The n Order seems to be related to the n Construction (c.f. creation of forms); to Sameness (c.f. repetition compulsions); to a high superego and to the n Blame avoidance (c.f. scrupulousness and precision to avoid censure). In a sublimated form it may be related to the n Sentience (enjoyment of balance and significant design), particularly if there is a preference for classical art forms; though artists themselves, in respect to their personal appearance and belonging, are proverbially unkempt and disorderly. It is as if their need for order was expressed in their creative work, and that everything else, including themselves, was left in disorder.
Edwards (1959) defines order as “to have written work neat and organized, to make plans before starting on a difficult task, to have things organized, to keep things neat and orderly, to make advance plans when taking trip, to organize details of work, to keep letters and files accordingly to some system, to have meals organized and a definite time for eating, to have things arranged so that they run smoothly without change.”

According to Dicaprio (1974), Murray’s need for order is manifested in behavior directed towards organizing the immediate environment. Some people have a compulsion to put things in order, to clean up, to arrange furniture and clothing neatly, and to organize and systemize books and other possessions. The orderly individual experiences tension when his home or room is in a condition of disarray. He must “get the mess straighten out”. Everything has a place and should be kept there.

Goldenson (1984) defines orderliness as the tendency to be neat and tidy and keep everything in place. Orderliness may express a need for security, and when extreme may be an obsessive-compulsive characteristics or a symptom of organic brain disease.

Orderliness is a personality trait found most commonly in person suffering from obsessive-compulsive disorder and obsessive-compulsive personality disorder.

Freud (1908) first described anal-erotic character as a triad of characteristics which are almost always to be found together – orderliness, parsimoniousness, and obstinacy (Ingram, 1961). Freud described obsessive-compulsive persons as having the three peculiarities of orderliness, parsimoniousness, and obstinacy: orderly comprises both bodily cleanliness and reliability and conscientiousness in the performance of petty duties, the opposite of it would be untidy and negligent (Gunderson and Philips, 1995). A need to resist external controls (obstinacy) preoccupation with details, orderliness,
perfectionism, meticulousness, envy, unproductiveness, interest in money, parsimony, sadistic tendencies, and anal erotism all attributed to unresolved conflicts during early phase of development were designated by Freud as comprising the anal character (Brody and Sata, 1967).

According to Martin (1971), sometimes the excessive inhibition of emotional expression is reflected in the obsessive ideas and compulsive acts being experienced in a cold, detached, and unemotional fashion. Lack of emotional spontaneity is also associated with excessive patterns of orderly, time table living and in the formal manner of interpersonal relations.

The trait of orderliness can be a success or failure in terms of its integration into the total personality. The trait of orderliness can be used successfully. Failure may be of two kinds: in one patient suffers in the second others suffer. One person may make his life a torment by his adherence to order, another may pride himself on his orderliness, imposing his standards on others and making them suffer (Ingram, 1961).

Beller (1962) is of the view that the individual with compulsive anal character structure experiences the world primarily as being more or less orderly and reacts to it, positively or negatively on that basis. While this attribute may restrict his life activities, impose hardship on those close to him, and result in much irritation for himself and others, he does not experience his own exaggerated evaluation of order as a problem and has no insight into its pathological nature. When his rigid adherence to orderliness gets him into difficulty, he blames external circumstances. If he blames himself at all, it is not for being orderly enough, rather than for being too orderly. As he sees it, the remedy for his difficulties, disappointments, and irritation lies in adopting a logical approach to these problem, in short, in being more, rather than less orderly.
According to Gordon (1963), extreme orderliness may be one way in which rigidity is satisfied.

Brody and Sata (1967) stated that compulsive personality is a diagnostic label applied to individuals whose actions are driven by needs for perfection and orderliness, who cannot tolerate ambiguity, who seem unable to change their minds after having arrived at decisions, and who have a need for closure and task completion that may not be appropriate to the context in which they are working or to the job at hand.

White and Watt (1973) state that obsessional symptoms occur in great variety. Orderliness may become the demon of patient's life, committing him to an endless task of straightening, arranging, recording, and filing. Orderliness, rituals, cleanliness, propitiatory acts, self-imposed duties, and punishments all testify to the patients need to counteract and set right his antisocial tendencies/guilt feelings which are his almost constant companion.

Perry and Valliant (1989) stated that essential features of obsessive-compulsive personality disorder are emotional constriction, orderliness, perseverance, stubbornness, indecisiveness, and rigidity. Through stubborn insistence on doing things the patients own way and by preoccupation with order and detail, the obsessive-compulsive personality often alienates others. The preoccupation with detail, lists, and the rumination over even trivial problem obviates taking much pleasure in life. They prefer being engaged in tasks to provide a distraction from anxiety until completed. They spend considerable efforts on organizing things and keeping their work and home environments neat and very orderly.

Obsessive-compulsive personality disorder is characterized by pervasive patterns of preoccupation with orderliness, perfectionism, mental and interpersonal control, and orderliness at the expense of flexibility, openness and efficiency, beginning by early adulthood and present in variety of contexts (Gunderson and Phillips, 1995).
One of the criteria of DSM-IV of obsessive-compulsive personality disorder individuals is being preoccupied with details, rules, lists, order, organization, or schedules to the extent that the major point of the activity is lost (DSM-IV, 1994). Van Kampen (1997) described orderliness as one of the major dimension of personality.

Over the years, number of investigators have worked on orderliness as one of the personality trait. Larsen and Togersen (1989) studied personality changes after gastric banding surgery for morbid obesity. They found that there was a general significant decrease in the post-operative scores on the oral cluster traits present already at the 1 year follow-up, most pronounced for self-doubt, insecurity, and sensitivity. On the other hand there was a significant increase in the post-operative scores on the obsessive traits: parsimony and orderliness.

Rothenberg (1990) found that as compared with a control group randomly selected from the remainder of the hospital patient population, obsessive-compulsive manifestations of, rumination, ritualistic behavior, excessive cleanliness, excessive orderliness, perfection, miserliness, rigidity and scrupulousness and self-righteousness were all significantly associated with the eating disorder patient group.

Rohr (1992) studied obsessive behavior and thoughts in patients with myasthenia gravis. Compared to normals, myasthenia patients show higher scores on the compulsion-subscale of the inventory. The most significant difference appeared on the orderliness-subscale. On the other hand rating of obsessive behavior is significantly lower than in the normal population.

Fenigold (1994) studied gender differences in personality. Males were found to be more assertive and had slightly higher self-esteem than females. Females were higher than males in extraversion, anxiety, trust, and tender-mindedness. There were no noteworthy sex differences in social anxiety, impulsiveness, activity, idea, locus of control, and orderliness.
Sasson et al. (1997) studied epidemiology of obsessive-compulsive disorder. The worldwide prevalence of obsessive-compulsive disorder is approximately 2% of the general population. Symptoms of OCD include fear of contamination by dirt or germs; constant checking; repetitive, intrusive thoughts of a somatic, aggressive or sexual nature; extreme slowness; and an inordinate concern with orderliness and symmetry.

Schlesinger (2001) reported a case of an independent professional contract murderer who killed over 100 people. He had a number of characteristics that helped him carry out his crimes in a highly planned, methodical, and organized manner; he had adept social judgment; personality traits of orderliness, control, and paranoid vigilance; useful defense mechanisms of rationalization and reframing; and an exceptional ability to encapsulate emotions.

Juang and Liu (2001) studied phenomenology of obsessive-compulsive disorder in Taiwan. The most common obsessive was contamination, followed by pathological doubt, and need for symmetry the most common compulsion was checking, followed by washing, and orderliness compulsions.

Kluger et al. (2002) compared the attitudes of anaesthetic specialists in New Zealand and Scotland. New Zealand anaesthetists rated independence, orderliness, compassion, empathy, reflectiveness and patience higher than did anaesthetists in Scotland.

Orderliness is a trait which is manifested in behavior directed towards organizing the immediate environment. It may express a need for security or could be attributed to unresolved conflicts. Orderliness is an essential feature of Obsessive Compulsive Personality Disorder. It has been systematically studied over the years and research depicts a clear relationship of orderliness as a personality trait with various disorders i.e. eating disorders and myasthenia gravis.
AMBITION

The term ambition was coined in the 14th century to describe the act of canvassing for votes in one’s ambit or precinct (Murray et al., 1970).

According to The Oxford English Dictionary, the word ambition means to be ambitious of, to desire strongly and the word ambitious means to be full of ambition, thirsting after honor or advancement, aspiring to high position (Simpson and Weiner, 1989).

Eysenck (1968) gave the following description of trait called ambition. According to him, “ambition is a tendency to overcome obstacles, to exercise power, to strive to do something difficult as well and as quickly as possible, to attain a high standard, to excel one’s self.”

Champy and Nohria (2000) define ambition as “both goal and goad....a compulsion to strive for something worth achieving..... a compelling hunger to achieve.”

According to Field (2002), ambition is defined as “a strong desire to achieve a significant goal, and is the organizing principle that directs the psychological processes of those who are characterized by the trait. As in the case with all dynamics in the extreme, ambition may be rigid or defensive, or aimed at covering deficits of the self.”

According to Fenichel (1945), “just as the idea of being eaten is the specific oral fear, and idea of being robbed of the contents of the body is the specific anal fear, shame is the specific force directed against urethral temptation. Ambition is presumed to represent the fight against the shame.” But obviously not all ambition can be traced back to the fight against shame over urethral incontinence as Fenichel (1945) himself points out. A more common explanation derives from the child’s identification with the broadly ambitious goals set for him by his parents (Blum, 1953).
Horney in the book “The Neurotic Personality of Our Time” wrote about the neurotic ambition. Horney (1947) stated that quest for power, prestige, and possession is one of the frequently used ways for obtaining reassurance against anxiety. It is apparent that such a striving usually develops only when it has proved impossible to find reassurance for the underlying anxiety through affection. Horney cited an example which shows how such a striving can develop in the form of ambition, when the need for affection is thwarted.

Horney (1947) also differentiated between neurotic competitiveness and normal competitiveness. First, the neurotic constantly measures himself against others, even in situation which do not call for it. Second, the neurotic ambition is not only to accomplish more than others; or to have greater success than them; but to be unique and exceptional. Another difference from normal competition is the implicit hostility in the neurotic ambition.

Horney (1947) stated that certain type of successful person has only one goal, the acquisition of power and wealth. But if the structure of such personalities is compared with that of definitely neurotic person there is one striking difference. The ruthless success-hunter does not care for the affection of others. The neurotic person however pursues two ways that are incompatible: an aggressive string for “no one but I” dominance; and at the same time an excessive desire to be loved by everyone. This situation of being caught between ambition and affection is one of the central conflicts in neuroses. The main reason why the neurotic becomes afraid of his own ambition and demands, why he does not recognize them and why he checks them or recoils from them altogether, is that he is afraid of losing affection.

Ambition as a personality trait is not described very often in the psychological literature. Field (2002) wrote, “in light of the myriad ways in which ambition colors the lives of individuals and organizations,
surprisingly little has been written about ambition in the psychological literature.

The terms closely related to ambition are the need for achievement, aspiration, will to power.

Murray (1938) in the proposals for a theory of personality described achievant attitude and ambitious attitude. According to Murray (1938), “actions which express what is commonly called ambition, will-to-power, desire for accomplishment, and prestige have been classified as follows:

n superiority (Ambitious attitude): This has been broken up into two needs: the n Achievement (will to power over things, people and ideas) and the n Recognition (efforts to gain approval and high social status).

n Achievement (Achievant attitude): To overcome obstacles, to exercise power, to strike to do something difficult as well and as quickly as possible (This is an elementary ego need which alone may prompt any action or be fused with any other need).

n Recognition (Self-forwarding attitude): To excite praise and, commendation. To demand respect. To boast and exhibit one’s accomplishments. To seek distinction, social prestige, honors, or high office.

Murray (1938) further described n Achievement as one of the twenty manifest needs. He viewed achievant, ambitious, competitive, aspiring as trait-names and attitudes for need for achievement. He described zest and ambition as feelings and emotion associated with n Achievement.

Guilford (1959) stated that these three general variables that represent need for achievement are general ambition, persistent effort, and endurance. He defined ‘General Ambition’ as a desire to “succeed” to achieve fame and fortunes. Two analyses of inventory scores and items have shown the following kinds of self reported behavior and feelings that characterize ambition (Holley, 1951; Guilford et al., 1954).
1. Has high general aspiration level (e.g. anticipates superior wealth and fame).
2. Has initiative (e.g., is resourceful leader in group activities).
3. Likes recognition and prestige (e.g. likes to be looked up to).
4. Is impatient (e.g. wishes time would go more rapidly).
5. Believes money is important (e.g. few things in life more important than money).
6. Does not believe in miracles.

Smith (1961) is of the view that will for power, level of aspiration, and the need for achievement are among the many synonyms of ambition.

According to Dicaprio (1974), “people in whom the achievement need is strong are described as ambitious, climbers, good scrappers.”

Achievement motive is closely related to ambition, some psychologist even consider it synonymous to ambition. Achievement motive has been defined over the years by various investigators.

The achievement motive, a desire to perform well and attain success, clearly plays an important note in individual and societal accomplishments. Henry Alexander Murray Jr. introduced the term into personality psychology as one of 20 fundamentals human “needs” or motives (Winter, 2000).

Murray (1938) defined need for achievement as the need to accomplish something difficult. To master, manipulate, or organize physical objects, human beings, or ideas. To do this as rapidly and as independently as possible. To overcome obstacles and attain a high standard. To excel oneself. To rival and surpass others. To increase self regard by the successful exercise of talent.

McClelland et al. (1953) defined achievement motive as “a concern over success and competition with a standard of excellence.”

Atkinson (1964) defined n Ach as “capacity to experience pride in accomplishment.” Further in his words “achievement motivation is an important determinant of aspiration, effort, and persistence when an
individual expects that his performance will be evaluated in relation to some standard of excellence" (1968).

According to Heckhausen (1967), achievement motivation can be defined as the striving to increase, or keep as high as possible, one's own capacity in all activities in which a standard of excellence is thought to apply and where the execution of such activities can, therefore, either succeed or fail.

Sanford (1961) defined \textit{ach} as an "energizing condition of the organism leading it in many situations to seek high standards of performance." According to Spence and Helmreich, the achievement motivation is best conceptualized in terms of three dimensions: work orientation, mastery, and competitiveness (as quoted by Hill, 1996).

High ambition is generally a desirable trait that leads to more successful performance. Guilford (1959) states that of all the motivational qualities that may contribute to successful achievement in life that of ambition or aspiration to achieve seems most important. Roe (1953) found such an attribute to be one of the most significant traits in common to high-ranking scientists in different fields.

Anhalt (2001) explored the relationship between personality characteristics and effective team work behaviors. The personality characteristics of ambition, sociability, and intellectance emerged as significant prediction of team work across sources and tasks.

Thomas (2001) studied personality and motivational predictors of military leadership assessment in the United States Army Reserve Officer Training Corps. He found that self-monitoring, extraversion, sociability and ambition (measures of extraversion), cognitive ability, military experience and power and affiliation were positively related to cadet leadership evaluations.

Michailids and Elwkai (2003) found that statistically significant differences exist between individuals in managerial and non-managerial
positions, as regards to their personality type, the degree of ambition, and work dedication they possess.

Barreto et al. (2004) studied the impact of past group experiences on individual ambition and effort. Those with a collective history of success see token mobility as a challenge and show superior performance, the same situation constitutes a threat to members of a historically disadvantaged group, who fail to take advantage of the opportunities offered to them and perform suboptimally.

On the other hand, personality trait such as excessive ambition can sometimes contribute to the development of certain diseases. Excessive ambition or achievement striving is one of characteristics of Type A behavior. From Friedman and Rosenman’s (1974), definition, five components of Type A behavior can be discerned, namely, impatience, achievement striving, anger, hostility, and competitiveness. Type A individuals—those who are involved in an incessant struggle to achieve more and more in less and less time were found to be higher on risk of coronary heart diseases in several early prospective studies (Laborthe, 1998). According to Glatzel (1987), people with coronary diseases are characterized by a strong drive towards and high degree of activity, by ambition and an aggressive stance.

Number of studies have been conducted to study the personality of patients suffering from Parkinson’s disease. Ambition is considered as a Parkinson’s disease related personality trait (Mouren et al., 1983; Horowski et al., 2000).

There are different methods by which we can measure ambition or ache motive. Various indices of achievement motivation can be grouped under the following broad categories. Fantasy related measures (including McCleland’s TAT), Questionnaire and Sentence Completion, Ratings by others and self, Memory effect-recall of unfinished tasks, Mode-rate risk taking in laboratory task and Activation level (Grover, 1984). Thematic apperceptive (or implicit) and questionnaire (direct or
conscious) measures of achievement motivation do not correlate; moreover they show different patterns of associated actions and life outcomes (Winter, 2000). Spangler’s (1992) analysis suggests that the TAT achievement motivation measure involves sensitivity to intrinsic, task-related achievement incentives; whereas the questionnaire measures reflect sensitivity to social incentives associated with achievement. These considerations suggest that implicit and conscious achievement motives are embedded in the fundamentally different motivational systems (McClelland et al., 1989).

Ambition is a strong desire to achieve and excel oneself. It could be aimed at covering or finding reassurance against anxiety. Will for power, level of aspiration and the need for achievement are among the many synonyms of ambition. Though high ambition is a desirable quality yet ambition as personality trait is more often in people suffering from certain diseases (Parkinson's disease and Coronary Heart Disease).

In the present investigation assessment of rigidity, orderliness, ambition would be done using Rigidity, Orderliness and Ambition Questionnaire (Kohler and Kosanic, 1992).