Chapter-I

Introduction
The prevalent attitude of a society to suicide among its members is shaped and fashioned from time to time by the beliefs of its people in the different periods of its history. The Vedic age, predominantly one of rituals, permitted suicide on religious grounds. The best sacrifice was man's life itself. To give up everything and to wander about in the forests was recommended in the Vedic period, and this amounted almost to suicide.

The Upanishads, with the posture of revolt against the Vedas, condemned suicide. The Upanishadic seers were not favourably disposed to the rituals of the Vedic people but stressed philosophizing and 'looking inwards', to realise the greater truth. A verse from 'Isavasya Upanishad' is condemnatory toward suicide: "He who takes his self reaches after death the sunless regions covered by impenetrable darkness."

The perennial question whether man has the right to shed his mortal coil has been discussed in the 'Dharmashastra'. According to these works, those who commit suicide are classed with those who commit cardinal sins.

Philosophers have held contradictory views about suicide. For example, Cynics, Stoics and the Epicureans, laid great emphasis on the freedom of will and recommended that the man has a right to terminate his life although he may not exercise the same rights in the matter of his birth. On the other hand, there are schools of Plato, Aristotle and others who conceive that life is penitential journey characterized by submission, piety, charity and one has no right to destroy himself. Suicide is considered as an act of robbery of divine property.

Hindu philosophy holds that life in its broadest term does not end with death. According to the ancient Indian thinking, death opens the door to the next life whose type is
determined by the way the preceding one was utilized. The Vedantic view admits only to
the death of the physical or gross body while attributing immortality to the ‘soul’- a
collective term for the psychic qualities.

Emile Durkheim (1951), the French sociologist, saw in suicide the reflection of the
disturbance in the social structure and functions. The psychological approach to the
problem of suicide came from Sigmund Freud (1940). He visualized the self destructive
behaviour as an inwardly directed aggression towards the internalized object.

1.1 Suicide

Suicide is described as an intentional self-inflicted act which has resulted in death
(Maris, 2002). Suicidal behaviour is at once paradoxical and strange. Its paradoxical
nature becomes quite evident when we realise how dear life is to us. Under a variety of
adverse circumstances, man clings to his life even if it were for months, days or even
hours or minutes. Hence the act of taking away one's life is indeed paradoxical and
strange.

In 1968, W.H.O. defined suicidal act as the injury with varying degrees of lethal intent,
and suicide is defined as a suicidal act with fatal outcome.

1.2 Attempted suicide

Interest in attempted suicide as distinct from suicide arose with the observation, amongst
others of Stelzner (1906), Dahlgren (1945) & Stengel (1952). Until then, workers on
"self-murder" either did not recognize or ignored the difference between suicide and
suicidal attempt. The later was considered just as an act that did not terminate
successfully with self destruction. A thesis has however been advanced by Stengel &
Cook (1958) to the effect that suicidal attempt is a pattern of behaviour that cannot be
understood fully without considering the context of human environment. These authors
stressed the need to view those attempting suicide and those that commit it as two distinct
though overlapping groups of population. They discovered a far reaching social
implication in a suicidal attempt. Attempts are so made as to make the intervention of
others possible or probable and thus avert a tragic end. They hold that an appeal to the human environment is inherent in several instances of suicidal attempt. On the other hand, factors such as inadequate planning of the act, impulsiveness and an uncontrolled rage prompting the attempts appear to be the cause of failure, rather than an appeal for pity and rescue from the environment in many instances (Harrington & Cross, 1959). Yap (1958) in a study of suicide in Hong Kong brought forth evidence that dangerous methods were adopted in suicidal attempts and the overlap between these and the completed ones was not inconsiderable. A suicidal attempt is defined as any act of self-damage inflicted with self-destructive intention however vague and ambiguous, the intention of which is inferred from the candidates' behaviour.

Suicidal act with nonfatal outcome are labelled by W.H.O. (1968) as suicide attempts, attempted suicides, para-suicides or acts of deliberate self harm. In the present study the term 'attempted suicide' is used.

1.3 Suicide Risk Factors

Since there are no reliable and specific tests for suicidal behaviour, the clinicians must rely on clinical, demographic, historical and patients self report information to guide their judgment and to tailor their intervention. The positive predictive value of the individual or group of risk factors is low. Stepwise multiple regressions were used to develop a statistical model that could predict suicide. Suicide is a very complex, multi-causal human behaviour with many causes and several biological as well as psychosocial and cultural components.

1.3.1 Gender

Women attempts suicide more frequently than men (3:1) although men commit suicide more frequently (4.1:1) (Hoyert et al., 2001). Women are more likely to have a diagnosis of major depression or borderline personality disorder. There are significant gender differences in the life time risk of suicide in major depression, estimated to be 7% in men and 1% in women (Blair-West et al., 1999).
Men are more likely to have substance abuse disorders and aggressiveness, which increases the risk of suicide.

1.3.2 Age

Those at highest risk are the elderly. The attempt to completion ratio for the elderly was estimated to be 4:1. One possible explanation for this significant mortality is missed diagnosis of major depression. Other risk factors for the elderly include bereavement, loss of functionality and independence, co-morbid medical conditions or chronic pain, financial stressors and diminished support systems. For men, dissatisfaction was more of a risk than poor health, while for women the opposite was true.

1.3.3 Substance abuse

It can increase the risk for suicide independently of the presence of other psychiatric illness and may contribute to both attempts and completions (Goldberg et al., 2001). It is difficult to disentangle the relative contributions of psychiatric illness, substance abuse, genetics, and family history. In one study of suicide victim utilizing psychological autopsy to assign diagnosis, alcohol dependence and abuse (43%) was second in prevalence only to depressive disorders (59%) (Henriksson et al., 1993). The lifetime risk for suicide in alcohol dependence is 7% (Inskip et al., 1998), although some estimates are higher. Heroin addicts had 14-fold increased risk compared to non-abusers in nine studies involving 7500 subjects. Evidence relating marijuana to suicide risk is scant and inconsistent. Amphetamine, LSD, and phencyclidine have been associated with heightened suicide risk and completion (Tondo et al., 1999). Cocaine use/dependence has been associated with suicide attempts and completion. During a 1-year period (1985) in New York City, 29% of suicide victims between 21 and 30 years age tested positive for cocaine (Marzuk et al., 1992).

1.3.4 Past attempts

A history of previous suicide attempts is the strongest predictor of suicidal behaviour and suicide completion (Brodsky et al., 1997). This holds across all psychiatric diagnosis.
However, an examination of all suicides in Finland (1987 to 1988, N=1397) revealed that 56% died with the initial attempt (Isometsa & Lomqvist 1998). Of the victims with a history of previous attempts, 39% were female, 19% were male, 82% switched methods, and 6% had six previous attempts. Suokas & colleagues (2001), in their 14-year follow up, found the risk remains elevated for at least a decade after the initial attempt, and that the risk factors may change over time.

1.3.5 Means

Virtually all suicidal intervention strategies include removing the means. There is a strong relationship between access to lethal means of suicide and completed suicide. As previously noted, women may have higher rates of suicide attempts because of less lethal means like overdoses and wrist cutting. Men have higher rates of completions because of more violent means like guns or hanging.

1.3.6 Family history

Roy (1983) compared a group of patients with a family history of suicide to a control group without family history of suicide. There were 274 suicides among first and second degree relatives in the study group. Almost 11% of the study group had two or more close relatives who died of suicide. Approximately half of the probands from the positive family history group had made 252 suicide attempts, collectively, compared to a suicide attempt rate of 21.8% in the control group. During the 7.5 year follow up, seven of the study group committed suicide. Between them, they had a total of 18 previous attempts. In this study, the association with affective disorder was most apparent, although there were genetic components associated with other risk factors for suicidal behaviour, including aggression, impulsivity and substance abuse.

1.3.7 Experience of loss

The experience of loss has been strongly associated with suicidal behaviour (Morano et al. 1993). In particular early losses and multiple losses are associated with the suicidal behaviour in the young (Benjaminsen et al., 1990). Though loss was defined in most
studies as an actual loss of close person, however other experience of loss, such as, mental or spiritual loss – loss of identity, faith, trust and aspirations may have an effect on suicide attempt.

1.3.8 *Psychiatric Disorder*

Psychiatric patients' risk for suicide is 3 to 12 times than that of normal population. The degree of risk varies depending on age, sex, diagnosis, and inpatient or outpatient status. The main risk groups are patients with depressive disorders, schizophrenia, and substance abuse. Patients, especially those with panic disorder, who frequent emergency services, also have an increased suicide risk. A high proportion of those who commit suicide have various associated personality difficulties or disorders. Having a personality disorder may be a determinant of suicidal behaviour in many ways: by predisposing to major mental disorders such as depressive disorders or alcohol dependence; by leading to difficulties in relationships and social adjustment; by precipitating undesirable life events; by impairing the ability to cope with a mental or physical disorder; and by drawing persons into conflict with those around them, including family members, physicians, and hospital staff.

Psychological autopsy studies have consistently shown that more than 90% of persons who die from suicide satisfy the criteria for one or more psychiatric disorders; untreated major depressive episodes being the most important among them. The long term risk of suicide in major depressive disorder has been estimated at 15% (Guze & Robins, 1970). However, more recent cohort studies have reported lower rates: 8.5% in the case of inpatients with depression (Berglund & Nilsson, 1987) and 3.6% in a cohort of people with affective disorders (Fawcett et al., 1987, 1990).

A number of clinical features seem to be linked to suicide, and this appears to vary with time. The early suicide (within 1 year of initial assessment) are associated with anxiety, panic, insomnia, anhedonia, poor concentration and alcohol abuse, whereas longer- term risk is associated with hopelessness (Beck et al., 1985; Fawcett et al., 1990).
Though depression remains one of the most important factors in suicidal behaviour yet suicidal behaviour is found without any antecedent history of depression. Bronish (1996) argued convincingly that suicide remains a phenomenon in its own right independently of depression, and suggested that other factors such as personality traits and life events could play an independent role in the development of suicidal ideations.

1.3.9 Co-morbid Medical Conditions

A number of medical conditions have been associated with increased risk of suicide. As reviewed by Hendin (1999), cancer, AIDS, peptic ulcer, Huntington's chorea, head injury and spinal cord injury are associated with high suicide rates.

1.4 Psychological factors in suicidal behaviour

Clinicians often strive for understanding individuals' suicidality in terms of the inner subjective experience of mental pain; fear and loss of self respect that cause people to want to end their lives. This approach invites the exploration of characterological dimensions and cause to suicide in addition to those indicated by heritability, neurobiology and psychiatric disorder.

Psychological vulnerability to suicide refers to specific psychological and personality functioning: i.e., discrete traits, long and short term dysfunctional cognitive pattern or behaviour, and dys-regulation of self esteem and emotions that are associated to or may evoke suicidal ideations or behaviour. Furthermore, a vulnerability model to suicide allows a more integrative approach to the understanding of each individuals unique risk pattern for suicidality. It takes into account the complex relationships between several possible contributing factors to suicide, including developmental, psychodynamic and internal subjective experiences of the suicidal person, psychological stressors as well as psychiatric diagnosis and neurobiological and genetic correlates. Such model can explain a meaningful amount of variance in suicide outcome over and above the effects of psychiatric disorders (Coner et al., 2001). They reviewed psychological vulnerability to completed suicide, and proposed the following dimensions: impulsivity/aggression, the
negative affects of depression, anxiety and hopelessness and self consciousness / social disengagement.

1.4.1 Hopelessness

A central factor is the issue of hopelessness. There is high association with hopelessness in long term suicide risk. Not specific to depression, hopelessness can accompany demoralization with a number of other syndromes as well. In a prospective study, Beck et al. (1990) found that hopelessness was highly correlated with eventual suicide.

In addition to hopelessness, Hendin (1991) identified desperation as another important factor in suicide. Desperation implies not only a sense of hopelessness about change but a sense that life is impossible without such change. Guilt was also found to be another affective component of desperation. This sense of guilt stemmed from self hatred and a need for punishment, attributable in part to perceive guilt from actions committed during combat and in part to survivor guilt. Brown & colleagues (2000) prospectively studied 6891 psychiatric outpatients over a 20 year period in an effort to identify the risk factors associated with suicide. Study revealed higher levels of suicidal ideation, depression, unemployment status and hopelessness were significant risk factors for suicide. Patients who scored high in Beck Hopelessness Scale were approximately four times more likely to commit suicide. Hopelessness that does not change with treatment may be predictive of suicide attempts and suicide (Dahlsgaard et al., 1998; Young et al., 1996).

1.4.2 Aggression

Aggression and violence are important in understanding suicide. Classical psychoanalytic theory postulated the importance of aggression towards the self in suicidal behaviour. Freud described suicide as a murderous attack on an internalized object that had become a source of ambivalence. Thus from a psychological sense, the introjected love object is the focus of the attack. Recent studies, however, demonstrate that aggression toward others — that is, violent behaviour often goes hand in hand with suicidal behaviour. Suicide usually was associated with conscious rage in the violent individuals and rage
should therefore be viewed as an important psychological factor underlying suicidal behaviour.

1.4.3 Mental pain

Shneidman (1996) contends that mental pain is at the heart of suicide. He emphasizes that when this pain reaches a high intensity and unbearable level, and it is perceived that there is no possible change in the future, the suicidal person seeks to escape it by committing suicide. Suicide completers and suicide attempters differ in their level of mental pain in that the completers have high levels of mental pain, suicide attempts are still considered to be an escape from an extreme levels of pain. Based on Shneidman’s theory, Orbach et al. (2003) have constructed and validated a mental pain scale. 9 factors have emerged in the analysis: irreversibility of the pain, loss of control, narcissistic wounds, emotional flooding, freezing, self estrangement, confusion, social distancing and emptiness. On the basis of these studies mental pain was defined as the perception of negative changes in the self and its function that is accompanied by extreme negative emotions and cognitions.

1.4.4 Self esteem dysregulation

Vulnerability to suicide has been associated with self esteem dysregulation. Heinz Henseler, the German suicidologist and psychoanalyst, believed that the act of suicide serves to save the individuals self feeling or self regard. (Hensler, 1974,1981; Etzersdorfer, 2001). Kohut (1972) and Kernberg (1984) added the role of self directed aggression, suggesting that narcissistic rage attacks can arise from intolerable, humiliating or threatening experiences or other injuries to the self. More specifically, self esteem dysregulation with accompanying emotional dysregulation is identified as a risk factor for suicide in people with disordered narcissism. Perry (1990) concluded that for narcissistic personalities “the extreme vulnerability to loss of self esteem coupled with dysphoria in response to failure, criticism and humiliation should put these individuals at high risk for suicide attempts”.

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1.4.5 Emotional dysregulation

Emotional dysregulation (Gratz & Roemer, 2004) has been connected to self harming behaviour (Linehan, 1993). There are two aspects of such dysregulation in suicidal people—(1) individuals inability to manage, process and communicate intense feelings, (2) proneness to see suicide as a way to regulate unbearable feelings, i.e., to control, get rid of or escape such overwhelming feeling (Baumeister, 1990).

Emotional dysregulation has been characterized by hypersensitivity and a tendency to quickly interpret situations as threatening or humiliating. It is also characterized by the presence of strong affects, especially rage and shame, and low tolerance of the nature and intensity of such feelings. Significant indicators are difficulties in modulating feelings and a tendency to fail in maintaining internal or external emotional control.

Three affects associated to the suicidal process (Hendin et al., 2004) are especially fundamental and of specific characteriological importance: i.e., shame, rage and fear.

Shame is associated to the failure to live up to ideals or to achieve important aspirations and goals. Shame involves a significant shift in self perception, accompanied by a sense of exposure and shrinking, and feelings of worthlessness and powerlessness. The perceptions of one's own feelings of shame tend to lower individuals self esteem and it is associated with the urges to hide (Tangney, 1995). Lansky (1991) considered shame as the most significant affect in suicidal patients, and rated other suicidal related emotional states such as depression, guilt, psychic pain and anger- as secondary to the emotional impact of shame.

Anger or rage generally serves to protect a person's self esteem and sense of special ness. Destructive narcissistic rage has been associated with functional regression, lack of control, irrationality and an archaic perception of reality (Kohut, 1972, 1977). In a suicide prone individual such rage can be deadly. Shame based anger can easily be directed towards the self, leading to suicide as a way of escaping intolerable pain. (Baumeister, 1990).
Fear — Many suicidal patients describe fear as the ultimate suicide triggering or motivating feeling, i.e. fear of loosing internal or external control, fear of loosing face or dignity in front of significant ones, fear of abandonment and loss of narcissistic support, or fear of disintegration or loss of reality.

1.4.6 Interpersonal dysregulation

The interpersonal context of suicidal ideations and behaviour has been associated with conflicts or losses, or social or personal failures (loss of face in front of others). However, there are additional patterns or behaviours that may act as regulatory factor implying more personal control and higher functioning, but actually covering underlying suicidal vulnerability or an ongoing process.

Achievements — Mostly young people use achievements to compensate or substitute for lack of close relationships and intimacy. Ability to compensate, win and receive admiration, praise or awards may temporarily counterbalance a deeper sense of isolation, detachment or lack of belongingness. King & Apter (1996) described such individuals as vulnerable to catastrophic de-compensation when facing educational and professional failures.

Isolative tendencies — People who feel suicidal often become detached and withdraw from others. Their denial, shame and isolative tendencies often prevent them from seeking help. For them suicide remains one and the only way.

Reactions to threats, injuries and criticism — Suicide or suicidal ideations can also have interpersonal meaning as a vehicle for control, realization and revenge. Borderline patients have strong reactions to the threat of abandonment and they use suicide as a mean to manipulate or seek help. Narcissistic patients on the contrary tend to react strongly to humiliation, loss of self esteem, supporting admiration and attention. In some cases a sense of internal mastery and control or shield against narcissistic injuries, i.e., "death before dishonour".
Adverse life events such as interpersonal loss or conflict, financial difficulty or serious physical illness can serve as important precipitants of suicide. In a study of young people those who died by suicide had more interpersonal and life events relating to criminal behaviour than living age- and sex- matched controlled subjects (Cooper et al., 2002). There are ample studies that show effect of adverse or stressful life events leading to subsequent illness and suicide (Paykel, 1975; Cochrane & Robertson, 1975). Adverse life events or stressful events are called stressors.

Stress is a negative emotional experience accompanied by predictable, biochemical, physiological, cognitive and behavioural changes that are directed either toward altering the stressful event or accommodating to its effect.

The relationship between stressful life events and attempted suicide is not a simple one. How a potential stressor is perceived substantially determines whether it will be experienced as stressful. How one perceives a potential stressor, then substantially determines whether one will experience stress. Therefore, most definitions of stress emphasize the relationship between the individual and the environment. Stress is the consequence of a person’s appraisal process: the assessment of whether personal resources are sufficient to meet the demands of the environment. When a person’s resources are more than adequate to deal with a difficult situation, the stress may be perceived as little while the person’s resources are not adequate the individual might experience a great deal of stress.

There are several intervening variables which greatly modify the effect of life events on the individual. These moderator variables are characteristic of the stressful situation, individual biological and psychological attributes and specific vulnerability and strengths of the individual personality and characteristic of the social support available to the individual.
1.6 Personality types and coping styles

There is great individual variation in responses to environmental stressors. Models of human behaviour that only involve environmental stress and reflexive behavioural responses cannot account for these variations in responses and are therefore considered to have limited utility and explanatory power. Richard Lazarus has reviewed the historical transition in health psychology and other disciplines from the traditional stimulus-response model to the more contemporary stimulus-organism-response model, which emphasizes the importance of understanding individuals' subjective experiences (Lazarus, 1999). It is only through understanding individuals' subjective experiences that the inter-individual differences in reactions to a stressor can be accounted for.

Personality and cognitive styles are the two psychological constructs that act as stress moderators which modify the intensity of experienced environmental stress. The personality that each individual brings to a stressful event influences how the individual will cope with that event. Some personality characteristics make stressful situations worse, whereas others improve them.

How individuals cope is another rich area of investigation. In addition to personality characteristics, which are general ways of responding across situations, coping style represents a more specific individual difference in how people respond to stress.

Coping can be defined as "thoughts and behaviours that the person uses to manage or alter the problem that is causing distress (problem-focused coping) and regulate the emotional response to the problem (emotion focused coping)" (Folkman et al., 1993).

1.6.1 Stress, coping and personality

Stress is a broad and general concept describing the organism's total reaction to the environmental demands (Selye, 1956). It has been found that stressor causes physiological arousal and increase susceptibility to illness. In view of this, research has begun to focus on the role of life events as either precipitating and/or predisposing factor in the development of onset of illness.
Earlier works on the contribution of stressful life events to different psychiatric disorders have led to contradictory findings. While positive relationship between the stressful life events and various psychiatric disorders were reported by Dohrenwend & Egri (1981), Paykel (1982), Roy-Byrne et al. (1986). Others have found inconsistent and insignificant relationship (Eisler & Polack, 1971; Goldberg & Comstock, 1976; Radhakrishnan et al., 1984).

At this point focus has been shifted from the study of stress and its consequences to the coping resources and personality that actually allows the individual to interpret the stressful situations in a typical way and compels them to react accordingly during the stressful situation.

Controversies exist as to whether personality or coping is synonymous. Indeed for Freud and other early ego development perspective (Freud, 1894; Freud, 1936), personality represented the patterns of coping mechanism that allow the individual to hold libidinous urges at bay.

Coping is viewed as a response to emotion within the animal model of stress. It is defined as learnt behaviours contributing to survival during danger (Miller, 1980; Ursin, 1986).

Present approach to coping implies that it is a concept overlapping with personality (Parkes, 1986; Terry, 1991; Suls et al., 1996). Personality is the dynamic organization of the psycho-biological systems by which a person shapes and adapts in a unique way to changing internal and external environments. Coping refers to overt or covert behaviours that are intentionally adapted to manage a problem situation (Leventhal et al., 1993). It might be suggested that people have preferred ways of coping that are predisposed by certain personality characteristics. Antonovsky (1979) proposed that an underlying personality dimension, sense of coherence, allows a person to cope with stressors effectively. General hardiness, a general personality dimension moderates the effect of stressful life events on physical health (Kobasa, 1979).
1.6.2 Ego functions and cognitive styles in relation to stress, coping and personality

Earlier researchers (Terry, 1991; Suls et al., 1996) had conceptualized that personality and coping have maximum overlap in producing a pattern of behaviour in solving problematic situation. Ego Functions (EFs) are the integrating and stable elements of mind through which an individual adapts to his environment (Lorr & McNair, 1965; Conte et al., 1991).

Now the question is whether ego functions can be conceptualized as coping or personality. The answer is not so straight forward. According to Fenichel (1945) ego coordinates and organizes impulses and wishes in accordance with the demands of reality. The organizing capacity makes ego a relatively stable component of psyche, while transaction with various demand of reality make it synonymous with ‘coping’. In fact, Fenichel so far as possible avoided the term personality and talked about the ‘character’ instead.

Character (or the conceptual core of personality) involves higher cognitive functions which are critical for cognitive processing of sensory percept and affects regulated by temperament, leading to the development of concepts about the self and the external world. Psychodynamic concepts defined mature character traits as residues of previous mature defence mechanisms that have become stable behaviour patterns. Psychodynamic theories have also recognized that ego not only protects from, but also shifts, organizes, and reacts to internal and external stimuli.

Ego functions can be thought to be akin to the coping mechanism because they represent cognitive processes (repression, denial, intellectualization, and problem solving behaviours) that can help to reduce anxiety and other distressing emotional states. Operations of ego have been described as nearer to the concept of relatively stable tendencies by others. Hartmann et al. (1946) suggested that psychiatric disorder is the result of experiencing such an amount of stress that exceeds the individual’s ego strength or capacity to tolerate it.
EFs are seen as the organizing elements of the mind and of the ways in which an individual adapts to his or her environment. Lorr & McNair (1965), Wiggins (1980), Conte & Plutchick (1981) viewed personality traits as typical ways by which the individual interacts with the environment. Hence EFs and personality traits should be highly correlated. In earlier study of Bellak et al. (1973) EFs have been accepted as a stable personality trait. Conte et al. (1991) showed EFs to be empirically closely related with personality traits. In this study EFs has been accepted in a sense of stable personality traits, in short EFs and personality traits can be considered as extension of one another.

1.7 Cognitive styles

Different people see the same situations in different ways that may contribute to the development of adaptive and maladaptive behavioural patterns (Kendall & Dobson, 1993). This corresponds to their cognitive styles. Cognitive styles can be best described as: how individual processes information and prefers to learn (Garity, 1985), the way individuals organize information and experience (Laschinger & Boss, 1984).

Just like cognitive ability people differ in their cognitive styles as well: their preferred mode of approaching cognitive tasks (Globerson & Zelniker, 1989).

Cognitive style is another construct like EFs through which individual conceptually organize the environment. It refers to an individual's typical way of perceiving, remembering, thinking and problem solving (Allport, 1937). This hypothetical construct has been developed to explain the process of mediation between stimuli and response. A particular cognitive style exerts a general influence over the persons day to day functioning. Hence, EFs and cognitive style can be considered as multi-dimensional moderator variables or coping system that has a significant role as stress tolerance mechanisms operative between stress and suicide.

Relation between negative cognitive style and vulnerability to depression is known (Blackburn et al., 1986). Though there is no evidence that specific cognitive dispositions of people are responsible for suicide, but cognitive style as a risk factor for depression...
and suicide has been explored (Levenson & Neuringer, 1971; Kaplan & Pokorny, 1976; Orbach et al., 1987, Guha et al., 2005; Guha et al., 2006).

In course of time the ego concept has greatly been changed. It is no longer regarded as a servant of id and with historical evolution it has acquired a self profile and is said to be a high valued component of personality. Considering the importance of ego a detailed discussion of ego is as follows.

1.8 Historical development of ego psychology

Though Freud had used the construct of the ego throughout the evolution of psychoanalytic theory, however ego psychology really began with the publication of ‘The Ego and the Id’ in 1923. That landmark publication represented a transition in Freud’s thinking from the topographic model of the mind to the tripartite structural model of id, ego and super ego.

Freud’s use of the term ‘ego’ was somewhat ambiguous in his early writings, with two main meanings: first the person or self as distinguished from other individuals and second the part of the mind that involves particular attributes and functions.

Freud’s concept of the ego was ill defined during the formative years of psychoanalysis. He used the term to refer to the dominant place of the person’s conscious thoughts and values, as opposed to the domain of repressed impulses and wishes. The ego’s primary function is defensive in nature (repression). Impulses and wishes primarily of sexual nature are barred from conscious awareness because of the counterforce provided by ego.

In the early years of 1890’s Freud viewed the memories of sexual trauma as the basic source of the defences. Those memories arouse unpleasant affect which leads to repression, which in turn causes a damming up of energy that produces anxiety. Thus ego in an attempt to reduce tension and avoid unpleasant affects through repression produces anxiety which is equally an unpleasant affect. Thus a contradiction of ego’s function becomes apparent.
When Freud shifted in 1897 from his emphasis on actual seduction to the role of childhood fantasy, he also suspended his thinking about the function of the ego.

In his ‘Project for a Scientific Psychology’ (1895) (unpublished), the ego was described as an organization that has a permanent cathexis, rather than a changing one and whose function is to inhibit psychical primary processes. After the ‘Project for a Scientific Psychology’ (1895) the idea of the ego as a coherent organization was not further developed for 20 years, during which Freud concentrated on the instinctual drive. Various ego functions, such as reality testing, judgment, thinking, impulse control and defence were discussed throughout Freud’s writings, beginning with the ‘Project for a Scientific Psychology’.

Freud’s first comprehensive theory of the ego appeared in ‘The Ego and the Id’ (1923). There, although the ego is primarily thought to be primarily revolving around the perceptual conscious system, it also includes the structures responsible for unconscious defences. The Ego at this stage, however, was viewed as relatively passive and weak. Its functioning was still result of the mediating pressures deriving from id, super ego and reality. The ego was helpless rider on the id’s horse, adopting a platonic image, more or less obliged to go where the id wish to go. The assumption remained that the ego was not only dependent on the forces of the id, but was somehow genetically derived and differentiated out of the id.

During this period the view of the ego underwent radical transformation. Some of the details of this development took place in connection with Freud’s theory of anxiety. In “Inhibitions, Symptoms, and Anxiety” (1926), Freud repudiated the conception of ego as subservient to the id. Freud introduced the concept of ‘signal anxiety’ which became an autonomous function for initiating defence. He increased the power of the ego over the id in his formulation of how the ego mobilizes defensive activity by initiating anxiety signals. The capacity of the ego to turn passively experienced anxiety into active anticipation was underlined. Here, too, the relatively rudimentary conception of the defensive capacity of the ego was enlarged to include the variety of defences that the ego had at its disposal and could utilize the control and direction of id impulses.
Moreover elaborations of Freud’s conception of reality principle introduced a function of adaptation that allowed the ego to curb instinctual drives when action prompted by them would lead into real danger. Thus the ego matured, and gradually substitutes pleasure principle into ‘reality principle’. The effect of this transformation of his theory of the ego was threefold. First, it brought the ego into prominence as a powerful regulatory force responsible for integration and control of behavioural responses. Second, the role of reality was brought to centre stage in theory of ego functioning. Even so, the conception of adaptation here was rudimentary and limited to the ego’s capacity to avoid danger. The notions that Freud was evolving during this phase provided the foundation for the later concept of the autonomy of the ego, as developed by later theorists. Finally, it was toward the end of this period that Freud finally made explicit the assumption of independent origin of ego that was quite independent of the inherited roots of the instinctual drives. This formulation was taken over by Hartmann and served as the basis for his notion of primary ego autonomy.

The systematization of ego psychology: The fourth phase of ego development can be seen as taking its initiation from the publication of Heinz Hartmann’s work on the ego and adaptation (1939). Hartmann’s work primarily focused on two aspects of ego namely, the autonomy of the ego and the problem of adaptation. Discussion of the apparatuses of primary autonomy was the basis for a doctrine of the genetic routes of the ego and a development of the notion of epigenetic maturation. He also recognized that ego structures and functions, arising in conflict, could undergo a change in function to become relatively autonomous from drives in the forms of so-called secondary autonomy. Hartmann’s treatment of adaptation also brought the adaptational point of view into focus in such a way that it has become generally acceptable as one of the basic meta-psychological assumption of psychological theory. The other extremely important aspect of the fourth phase is the re-emergence of the importance of reality in its broadest and most profound meanings as a significant dimension of psychoanalytic thinking. This is in many ways a direct extrapolation of Hartmann’s thinking about adaptation, because the adaptive functioning of the organism has directly to do with fitting in with the requirements of external reality and adaptively interacting with the environment.
1.9 Ego function as construct

The most widely accepted model of psychoanalysis till now is the tripartite model of structural theory - the structures being id, ego and the super ego. But one must admit that, knowledge on both structural as well as dynamic, economic, genetic and adaptive processes are necessary to know about human behaviour.

The ego, one of the major structures considered in psychoanalysis related to patterns of organization schemata, agencies and apparatus. Functions typically refer to activities and processes. The structures are relatively fixed substitutive, on the contrary functions are considered as variations within these structures.

The concept of structure is most usefully viewed as a specific process, which is characterized by a slow rate of change and involves an organization of elements and a characteristic style of response (Rapaport, 1957) in contrast to a rigid, static entity or faculty.

Ego function constructs may refer to mental contents, processes or outcomes. Ego functions are closely related to biological substratum. Lack of maturation, intoxication, various neurotransmitters and structural changes can affect the nature of ego functions (Bellak, 1979). The study of ego functions can be bifurcated along the following lines: one is focusing on adaptation to the environment and another is highlighting on the inner processes where the focus is on personal meanings or subjectivity.

Ego functions differ from person to person. There is a substantial stability in the adaptive level of ego functioning characteristic for a given individual. It is also true that the adaptive adequacy of ego functioning varies more in some people than in others and indeed, the readiness with which fluctuations occur is an important aspect of personality.

The adaptive level of ego functioning is generally more stable in well functioning individuals than in those who show marked psychopathology. Hartmann (1953) proposed that one criterion of ego strength is the extent to which ego functions resist regressive changes under stress.
1.10 The concept of ego functions

An approach to define ego that has been widely accepted by the psychoanalysts is in terms of its functions. The ego comprises a class of self functions that shares in common the task of mediating between instincts and the outside world. Thus the ego is a sub system of the personality and not synonymous with the self, the personality or the character. Any attempt to compile a complete list of ego functions would have to be relatively arbitrary. Invariably, the list of basic ego functions suggested by various authors differs in varying degrees.

Freud was concerned with an ego construct throughout his psychological writings. He defined the ego – as well as the id and the super ego – by its functions. In “An Outline of Psychoanalysis” (1940) Freud discussed the principle characteristics of ego. He included self preservation; becoming aware of, and dealing with, external stimuli; controlling voluntary movement; and learning to influence the external world to our own advantage through activity. Other aspects of ego functions are the seeking of pleasure and the avoidance of pain, taking external circumstances into account in deciding when to satisfy instinctual drives, and transmitting an unexpected increase in unpleasure by an anxiety signal. Finally, the ego attempts to avoid overly strong stimuli, has a memory function and attempts to reconcile the demands from the id, super ego and the reality sources.

According to Anna Freud (1936) ego functions were: the testing of inner and outer reality, building up of memory, the synthetic function and the ego’s control of motility. Hartmann et al. (1946) referred to thinking, perception and action as the three main functions of the ego though they pointed out that these functions are frequently in the service of the id and the super ego.

Hartmann discussed the functions of the ego in 1950. He began with those functions centred on the relation to reality. The ego serves as a barrier against the external and internal stimuli, tests reality, carries out action and engages in thinking. Both action and thinking imply and require delay of discharge and these ego activities along with the ego’s use of anxiety as an aid in anticipating danger, are part of the organism’s
internalization tendency, which decrease its dependence upon current stimuli and permits it to function autonomously. Those functions associated with internalization can also be characterized as inhibitory; the most carefully studied defences have been the inhibitory processes. Finally, Hartmann includes the synthetic function, i.e., coordinating and integrating, which together with the ego's capacity for differentiating - called organizing function.

Bellak (1955) listed the following ego functions – (1) ego organizes and controls motility and perception; (2) ego serves as a protective barrier against excessive internal and external stimuli, performing the function of self exclusion; (3) ego tests reality, engages in trial action, and sends out danger signals; (4) ego is responsible for detour behaviour in gratification; and (5) organizing and self regulating functions which includes character, defences, and the integrating aspects of ego.

Arlow & Brenner (1964) in their systematic presentation of the structural theory of psychoanalysis, discussed the following ego functions - consciousness, sense perceptions, perception and expression of affect, thought, control of motor action, memory, language, defence mechanisms and defensive activity in general, control regulation and binding of instinctual energy; integration and harmonization; reality testing and inhibition or suspension of the operation of any of these functions and regression to a primitive level of functioning.

The ego has been defined as the aggregate of the percepts or learned patterns of behaviour to the extent that these learned patterns of behaviour can be affected by newly experienced perceptions. The role of ego in shaping the aspects of thinking and communication pattern has been stressed. Ego functions (EFs) are mechanisms of adaptation to the outer and inner reality demands. EFs are intra-psychic constructs that help the organism to perceive the nature and magnitude of stressors, to process and analyze them, and finally to react or respond to them so that maximum harmonious existence is made feasible.
Ego function assessment gives a broad spectrum profile of personality with specific information as to the nature and degree to the ego dysfunctions and under functions and how these deficits may affect other areas of ego functions.

1.11 Ego function assessment

Ego function assessments have been attempted by various authors at different times. Beliak et al. (1973) described a method of studying 12 ego functions in a 7 point or 13 point scale based on interview conducted to assess each ego function. To enhance its applicability in clinical as well as in general population, a 120 item questionnaire version of the same has been prepared (Beliak, 1989) and named as Ego Function Assessment (Modified) Scale or EFA-M.

Beliak et al. (1973) described 12 ego functions in terms of its major components. It is referred as mental contents or processes that mediate between environmental inputs and inner states. Thus they encompass both adaptation to environment and adaptation to inner processes. These 12 ego functions along with their major components are illustrated as follows.

1. **Reality Testing (RT)** - The components are a) the distinction between inner and outer stimuli; b) accuracy of perception (including orientation to time and place and interpretation of external events); and c) accuracy of inner reality testing (psychological mindedness and awareness of inner states).

2. **Judgment (JD)**: The components are a) awareness of, appropriateness of and likely consequences of, intended behaviour (anticipation of probable dangers, legal capabilities and social censures or disapproval); and b) extent of manifest behaviour as a reflection of the awareness of these likely consequences.

3. **Sense of Reality of the World and of the Self (SR)**: The component factors are a) the extent to which external events are experienced as real and as being embedded in familiar context (degree of de realisation, déjà vu, trance like states); b) the extent to which the body (or parts of it) and its functioning and ones behaviour are
experienced as familiar, unobtrusive, and belonging to (or emanating from) the individual; c) the degree to which the person has developed individuality, uniqueness and a sense of self and self esteem; and d) the degree to which the person’s self representation are separated from his object representations.

4. Regulation and control of Drives, Affects and Impulses (DC): The components are a) the directness of impulse expression (ranging from primitive acting out through neurotic acting out to relatively indirect forms of behavioural expression); and b) the effectiveness of delay and control, the degree of frustration tolerance, and the extent to which drive derivatives are channelled through ideation, affective expression and manifest behaviour.

5. Object (or Interpersonal) Relationships (OR): a) the degree or kind of relatedness to others and investments in them (taking account of withdrawal trends, narcissistic self concern, narcissistic object choice or mutuality); b) the extent to which the present relationships are adaptively or maladaptively influenced by, or patterned on, older ones and serve present, mature aims rather than past, immature ones; c) the degree to which the person perceives others as separate entities rather than as extensions of himself; and d) the extent to which the person can maintain object constancy (i.e., sustain relationships over long periods of time and tolerate both the physical absence of the object and frustration, anxiety and hostility related to the object).

6. Thought Process (TP): The components are a) the adequacy of processes that adaptively guide and sustain thought (attention, concentration, anticipation, concept formation, memory and language) and b) the extent of relative primary-secondary processes influences on thought (degree to which thinking is unrealistic, illogical or loose).

7. Adaptive Regression in the Service of the Ego (AR): The components are a) relaxation of perceptual and conceptual acuity and other ego controls with a concomitant increase in awareness of previously preconscious and unconscious
contents b) the induction of new configurations that increase adaptive potentials as a result of creative integrations.

8. **Defensive Functioning (DF):** The degree to which defensive components adaptively or maladaptively affect ideation and behaviour b) the extent to which these defences have succeeded or failed (degree of emergence of anxiety, depression, and others dysphoric affects including weakness of defensive operations).

9. **Stimulus Barrier (SB):** The factors are a) a threshold for, sensitivity to or awareness of stimuli impinging on various sensory modalities (primary external, but including pain) and b) the nature of response to various levels of sensory stimulation in terms of the extent of disorganization, avoidance, withdrawal or active coping mechanisms employed to deal with them.

10. **Autonomous Functioning (AF):** The components are a) the degree of freedom from impairment of apparatuses of primary autonomy (functional disturbances of sight, hearing, intention, language, memory, learning, or motor function); and b) degree of, or freedom from impairment of secondary autonomy (disturbances in habit patterns, learned complex skills, work routines, hobbies and interests).

11. **Synthetic-Integrative Functioning (SF):** The components are a) degree of reconciliation or integration of discrepant or potentially contradictory attitudes, values, affects, behaviour, and self-representations; and b) degree of active relating together and integrating of psychic and behavioural events, whether contradictory or not.

12. **Mastery-Competence (MC):** The components are a) extent of competence, that is, the person's performance in relation to his or her existing capacity to interact with and master his or her environment; and b) the extent of sense of competence, that is the person's expectation of success or the subjective side of actual performance (how well the person believes he or she can do).
1.12 Context of the present study

The above discussion suggests that people are born with certain innate predisposition to respond to in particular ways to the environment. Life events are psychologically significant events that occur in people's life and which require people to adjust to the environment with certain disposition of personality and cognitive style, when an individual encounters life stressors that may lead to depression and subsequently suicidal ideation which sometimes end in suicidal attempts. Ego functions are stable personality factors that help the individual to perceive the nature and magnitude of the stressors, to process and analyzed them and finally to react or respond to them so that maximum harmonious existence is feasible (Fenichel, 1945). Cognitive styles are another construct like EFs through which individual conceptually organize environment. It refers to an individual's typical way of perceiving, remembering, thinking and problem solving (Allport, 1937). As conceptually EFs are stable perceptual function and they help the individual to perceive the nature and magnitude of the stressors, hence EFs process the cognitive styles which in turn make the individuals adopt for typical ways of perceiving, thinking and remembering. These personality variables might act as 'safe guards' that might protect the individual during emergency or crisis.