CHAPTER - 2

SURVEY OF RELEVANT LITERATURE
2.0 Literature survey is an important step of any research activity. It provides us with information regarding the previous research endeavours undertaken in the present area of interest. Thus it serves as a guiding force to determine the nature and direction of the present research study.

The aim of the present chapter is to provide a view of the past studies with respect to the different psychosocial variables associated with suicidal ideation in late adolescents and young adults. To achieve this end, the chapter will be divided into the following subparts:

2.1 Works on adolescents and college students.
2.2 Works on suicidal ideation with its multidimensional facets.
2.3 Works on aggression and its associated features.
2.4 Works on interrelationship of different dimensions of personality.
2.5 Works on achievement motivation and other dimensions.
2.6 Works on reasons for living and its associated aspects.

Adolescents report significantly more negative states and extreme positive states than both their mothers and fathers (Verma and Larson, 1999). Negative emotional states of adolescents were related to school stress and inversely related to family and peer variables. These factors may contribute to adolescent emotionality. Significantly inverse correlation between rates of negative emotions and mental health indicate that frequent negative emotions among adolescents should not be dismissed as normative.

2.1 WORKS ON ADOLESCENTS AND COLLEGE STUDENTS

2.1.1 Works on Adolescents

Adolescence is one of the key phases of the life cycle and successful transitions are made if certain necessary conditions like a good nurturance, positive community environment and public policies
supporting youth and their families are present (Irwin, 2004). Greater participation in club activities was linked with higher academic grades and more positive teacher ratings of academic competence. Similarly, greater participation in sports was associated with higher levels of psychosocial maturity and more positive teacher ratings of social competence (Fletcher, Nickerson and Wright, 2003).

Rural and Urban adolescents, both face stressful life events of different sorts and at various time points in their transitional phase. Levels of stress and ways of coping were similar in rural and urban adolescents. Urban males reported more conflict and externalizing behaviours than females and rural males. Thus adolescents may utilize many coping strategies that serve little benefit in terms of behavioural outcomes (Elgar, Arlett and Groves, 2003). Less benefit from the coping strategies being used may lead to depressive feelings among both males and females. In turn, depression is a greater risk factor for physical aggression in treatment seeking female, compared to male adolescents (Knox, Carey and Kim, 2003). Again, the presence of negative affectivity is positively related to adolescent substance use, whereas social anxiety appears to be protective against substance involvement (Myers, Aarons, Tomlinson and Stein, 2003).

Along with the negative aspects of the period of adolescence, trying to be established and achieving one's life goals are of its positivities. However, the perceived inability for some students to consistently meet their high standard (maladaptive perfectionists) was significantly and negatively related to perceptions of school and family relationships, and greater emotional distress (Gilman and Ashby, 2003). Dependent upon the amount of stress, age interacted with religious orientation to influence the use of two coping strategies, turning against an object and turning against self (Palmer and Sebby, 2003). Clinically referred and non-conspicuous adolescents significantly differed in their stress perception and coping style, with clinically referred adolescents exhibiting a more dysfunctional coping style when
dealing with school-related stressors and conflicts with parents (Seiffge-krenke, 2003).

According to Adamson (2003), self concept consistency is lower among adolescents (16-20 years) in comparison to adults. Inconsistency is more common among adolescent girls than among boys. Inconsistency was significantly related to a number of negative factors like suicide attempts and low satisfaction with the self. Transitions from inconsistency to consistency are possible through a change in the quality of interpersonal relationships. Parental support is a better predictor of psychological well-being, but only in early and middle adolescence. Identity develops progressively with age, and also the relation between identity status and psychological well-being was found to become stronger with age (Meeus, 2003).

Negative life events and emotional reactions to the severing of social ties frequently occur as antecedents of suicide in Greek mythology (Preti and Minotto, 2005). Suicidal behaviour is a serious public health concern that has prompted the development of prevention strategies, which include increasing community members' knowledge about suicide (MacDonald, 2004). Thus being confident in one's ability to overcome challenges and having a positive outlook, function as protective factors, whereas being less hopeful may place a child at risk for developing adjustment problems (Hagen, Myers and Mackintosh, 2005).

According to Stice, Ragen and Randall (2004), support decreases the risk for depression but suggest that this effect may be specific to parental support during early adolescence. Deficits in parental support but not peer support predicted future increases in depressive symptoms and onset of major depression. In line with this findings, Fernández and Castro (2003) predicted that persons in the age range of 12-16 years had lower self-esteem than others between the ages of 17 and 28 years. Individuals with higher self-esteem were more
certain of their central self-conceptions than were those with lower self esteem (Story, 2004). Hence adolescents’ attachment security was positively related to family communication and negatively related to negative avoidance behaviours such as drinking or using drugs (Howard and Medway, 2004). Least able copers used, at least sometimes, non-productive strategies such as tension reduction, self blame, ignore, keep to self and, most noticeably worry and wishful thinking (Frydenberg and Lewis, 2004).

Thus the primary predictor of girls’ self-efficacy was their parents’ emotional support and of boys’ self-efficacy was their parents’ career-related modelling (Alliman-Brissett, Turner and Skovholt, 2004). The overall rankings showed evidence of the persistence of gender differences in preferences for a number of curricular areas. Practical subjects appeared further up the rankings, particularly for the younger students. It therefore reflects a change in the status of such subjects relative to the more academic subjects (Colley and Comber, 2003). Improved academic outcomes were likely only when a possible self could plausibly be a self-regulator. Thus the influence of self regulation on change in behaviour and academic outcomes than affect regulation were supported (Oyserman et al. 2004).

Lastly, the more assets students reported, the more they thrived in physical, psychological, social and academic domains. Adults must become more intentional about building the relationships, opportunities, values, and skills young people need for optimally healthy development (Scales et al., 2003).

2.1.2 Works on College Students

Hashim and Zhiliang (2003) indicated that academic and interpersonal sources of stress were the most common stressors. High pressure and challenges perceived by both African and Western students were classified as daily strains. Both males and females tend to experience the highest stress levels due to daily strains. However
high scores on measures of optimism resulted in less perception of stress than pessimism (Baldwin et al., 2003).

Stress reactivity is more strongly related to neuroticism and its facets of depression, anxiety and vulnerability to stress. Elevated stress reactivity to minor stressors indicate diminished ability to cope with everyday challenges and may predict increased vulnerability to be depressed (Felsten, 2004). Negative cognitive style and insecure attachment were found to be significantly associated with both depression and anxiety symptomatology (Safford et al., 2004). Along these lines, depression and low life satisfaction were associated with low perceived control and mastery and with strong beliefs in the influence of chance over health (Wardle et al., 2004). Individuals who were fast to make negative evaluations experienced more negative affect and more somatic symptoms and were less satisfied with their lives (Robinson, Vargas, Tamir and Solberg, 2004). Depression, anxiety, somatic and social dysfunction symptoms were associated in different degrees to chronic stress, emotional coping style, work role dissatisfaction and low self-esteem (Matud, Camacho, Hernández, Marrero, et al. 2004).

Thus mental health is negatively associated with stress and positively to internal resources and social support. Perceived stress is an important risk factor for low mental health and mastery along with self-esteem are important protective factors of mental health among young adults (Bovier et al., 2004). In other terms religiously committed individuals exhibit lower levels of distress. Such people report higher levels of sense of control and social support, which consequently reduces distress (Jang and Johnson, 2004). Thus effects of stress are moderated by differentiation of self (Murdock and Gore, 2004) because differentiation of self involves the capacity to modulate affect, maintain a clear sense of self, and balance intimacy and autonomy in significant relationships (Skowron, Wester and Azen, 2004).
Other than stress and coping, life goals are also of significance in the young adult's life. Individuals who have coherent hierarchies of growth goals on the levels of major life goals and every day goals were especially likely to have high levels of personality development (Bauer and McAdams, 2004). Though goals are of significance, individuals however exhibit more ambivalence about the benefits of failure and manifest higher levels of self doubt along with the tendency to discount ability under conditions of effort exertion (Chang et al. 2004).

Thus things to be emphasized are emotional, personal, relationship goals over a life of public service (Abowitz and Knox, 2003) along with attention on social activities and social adjustment as soon as students arrive on the college campus (Woosley, 2003).

Above all, individuals pattern of acceptance in the family by parents accounts for a complete healthy development. Results have shown that daughters and sons levels of emotional empathy are directly related to the level of perceived maternal and paternal acceptance respectively (Kim and Rohner, 2003).

2.1.3 Indian Studies

A glimpse of the Indian references is as follows: -

Sahoo, Dash and Mohapatra (1998) compared the coping mechanisms used by resilient and non-resilient children. Results show that resilient children used greater social support system outside their families.

Rai and Singh (1996) indicated that boys with high scores on emotional warmth and over protectiveness manifested extraverted and introverted personality patterns respectively. Both boys and girls with higher scores on the rejection scale manifested unstable personality. Girls scoring high on emotional warmth manifested stable personality patterns whereas boys obtaining higher scores on over protectiveness manifested unstable personality patterns.
Shama and Singh (1997) revealed significant differences between rural and urban male and female undergraduates with respect to emotional maturity. Rural undergraduates, both male and female, exhibited greater emotional maturity than their urban male and female counterparts.

Bhattacharyya and Basu (1995) revealed that achievement motivation (n - Ach) was positively related to projection and negatively related to "denial", but it was not related to identification. It was concluded that n-Ach had a relationship with adaptive defensive function of ego, bounded by a linear path.

Godbole and Madhukar (1995) investigated the variations and patterns of self-concept and adjustment in youth with reference to age. Results indicated a developmental trend of better self-acceptance, health and social adjustment among older girls.

Irfan et al. (1993) predicted that non-truants were higher on achievement motivation whereas truants were poorer on other dimensions such as emotional, educational, and total school adjustment.

Zainuddin (1996) examined the influence of age and religion on death anxiety, and the relationship of it with personality variables in students aged 17-21 years. Results revealed that the feeling of death anxiety was highest in the 20 year age group, and lowest in the 17 year age group. Muslims experienced slightly more death anxiety than Hindus. Those who experienced a higher level of death anxiety (DA) were more reserved, toughminded and conservative as compared to those low on DA, who were more outgoing, tenderminded and radical.

Paintal and Pandey (1996) indicated greater conflict with father in both boys and girls. The high income group children have more conflict with father than middle income group. Boys and girls both have favorable attitudes towards mother. With regard to expectations, boys
express longing for greater wealth and high status of both their parents, girls desired greater love, attention and encouragement.

Singh et al. (1996) revealed that high test anxiety, high intelligence and failure stress facilitated motor perceptual learning independently as all interactions were found to be insignificant.

2.2 SUICIDAL IDEATION WITH ITS MULTIDIMENSIONAL FACETS

2.2.1 Motives of Suicide

Barber, Blackman, Talbot and Saebel (2004) reported that males under 35 years were around 75% more likely to refer to relationship breakdown in their calls than were same-age females. Male callers were also around twice as likely to refer to being the victim of abuse and nearly 60% more likely to refer to interpersonal and family problems.

Lester, Wood, Williams and Haines (2004) analysed a large number of suicide notes from 262 suicides in Australia and found that men less often had escape from pain as a motive for their suicides and more often had love/romantic problems. The suicides of older persons were more often motivated by escape from pain and less often had love/romantic problems.

Leenaars, De Wilde, Wenckstern and Kral (2001) identified that the suicide of teens may be more highly related to cognitive constriction, indirect expressions, rejection-aggression, and identification-regression, than other age groups. Further research beyond the suicides' own narratives (e.g., third-party interviews, study of attempters) is needed to replicate and extend the current findings.

O'Connor, Sheehy and O'Connor (1999) yielded support for the existence of psychological suicidal correlates. Depressed suicides were more likely to communicate difficulties in developing attachments or to exhibit cognitive constriction than nondepressed note writers. This
research has helped to identify psychological differences that should be beneficial in the prevention of suicide. Such differences should be integrated into existing risk assessment schedules.

Everall (2000) identified common themes and personal meanings that characterized the experiences of 5 young adults (aged 24-27 yrs) who made 1 suicide attempt between ages 20-24 yrs. Six major themes identified were (1) family experiences, (2) adolescent interactions, (3) self-destructive behaviors, (4) depression, and (5) perception of control. Suicidal attempts were viewed from the perspective of a continuous process that encompassed the individual’s world view and experiences rather than an isolated events.

2.2.2 Child, Adolescent and College Student Suicide

Beautrais (2001) indicated that suicide risk increases with age: the majority of those who die are aged 14 yrs (57.4% of the total) or 13 yrs (26.2%). Boys (72.1%) and Maori (57.4%) predominate. Most suicides occurred in children not living in intact biological families (67.2%). Hanging was the predominant method (78.7%). One in three children left suicide notes. One in 4 had a history of contact with social welfare authorities. There was a family history of suicide attempts (13.1%) or mental health problems (23%). One in 4 (23%) was reported to have made threats of suicide within the year prior of their death. A majority of deaths appeared to have been precipitated by relatively minor family arguments or disciplinary events, which occurred in the context of actual or anticipated disruptions or transitions in family living arrangements or school.

Carlson (2001) found significant differences in positive/negative valence of self schemas, across a number of dimensions, among the groups. Additionally, differences in stability of self in the present were discovered among 3 groups. These findings suggest that the use of specific, fine grained assessments can contribute to understanding of
explicit dimensions within the self that may be related to emotional and/or behavioral issues in adolescence

Lester (2003) indicated that although youth suicide rates are high, they are lower than rates for elderly, have increased less dramatically in recent decades, and are higher for boys than for girls. It is argued that the increases in adolescent suicide rates that have occurred in some nations are a result of improved quality of life for adolescents, a factor that leads young people to blame themselves for failure.

Hass, Hendin and Mann (2003) pointed to significant mental health problems on college campuses and suggests the need for outreach programs to identify students at risk for suicide and encourage them into treatment.

Joseph, Reznik and Mester (2003) depicted that adolescent girls' suicidal behavior is different in many aspects from boys' suicidal behavior. Girls mortality rate from suicide is a 3-5 times lower rate than boys, but their attempted suicide rate is four to hundreds times higher. Girls suicide mainly by drugs and their suicide is mainly in relation to interpersonal difficulties. Their motivation is often a cry for help. The comorbidity of suicide and depression is much higher for adolescent girls than boys.

McAuliffe, Corcoran, Keelet and Perry (2003) indicated that almost one-third of the students surveyed had lifetime suicide ideation. Both genders were similar in terms of their suicide ideation history, problem solving, and attitudes toward suicidal behavior with the exception that male students were more in agreement with the attitude that suicidal behavior lacks real intent.

O'Donnell, Stueve, Wardlaw and O'Donnell (2003) revealed that only half of those reporting a suicide attempt had spoken with an adult about their distress. Suicide attempters were more likely than nonattempters to report they would not go to family members in the future, although they were more likely to report a past discussion.
Improving communication among youth, families and service providers should be a focus of suicide prevention planning.

Madu and Matla (2003) indicated that a higher percentage of males than females had attempted suicide. The most frequent method used for attempting suicide was self-poisoning followed by drug overdoses, hanging, self-stabbing and other methods, including jumping from heights, starvation, and drug abuse.

Derouin and Bravender (2004) discussed current knowledge about adolescent self-mutilation (SM), including treatment approaches for affected teens and young adults. One in eight American teenagers experience depression or anxiety. The incidence of SM is increasing, and might be fueled by current trends in music and media that highlight violent and self-injurious behaviors. SM represents a “cry for help” by adolescents who are suffering. Self-mutilators who repeatedly cut themselves with razors, scissors, knives, or sharp glass are not attempting suicide, but are seeking to relieve extreme anxiety, tension or pain.

Poch, Villar, Caparros, Juan, et al. (2004) indicated that 13.9% of the student present moderate or severe levels of hopelessness. The students with greater levels of hopelessness are dissatisfied with different aspects of university life, spend less time on extracurricular educational activities and are less likely to go to examinations. Also, the relationship between hopelessness, depression and suicidal ideation is once again clearly seen. The results suggest that need to develop some type of programme or service for the university community which could influence the mood of students and modify their expectations with the aim of preventing suicidal behaviour and improving their adaptation to university life and, consequently, their academic performance.

According to Judge and Billick (2004) treatment consists of ensuring safety and then treating the underlying psychiatric, psychological, and
interpersonal disturbances. Issues of consent, confidentiality, and malpractice actions are addressed.

Yip, Liu, Lam, Stewart, et al. (2004) indicated that a range of factors, such as unhappy family life, were associated with increasing levels of suicidality. Use of illicit drugs, inhalants, and tobacco differentiated attempters from ideators.

Kisch, Leino and Silverman (2005) indicated that depressed mood, difficulties of sexual identity, and problematic relationships all increase the likelihood of vulnerability to suicidal behavior. Less than 20% of students reporting suicidal ideation or attempts were receiving treatment.

Thompson, Mazza, Herting, Randell et al. (2005) showed direct effects of hopelessness on suicidal behaviors for males, and direct effects of hopelessness, but not depression, for females. For both males and females, anxiety was directly linked to depression and hopelessness; drug involvement had both direct and indirect effects on suicidal behavior. As hypothesized, lack of family support showed indirect influences on suicidal behaviors through anxiety for both males and females.

According to Evans, Hawton, Rodham and Deeks (2005) females were significantly more likely than males to report most suicidal phenomena. A lower prevalence of some suicidal phenomena was found for Asian populations.

Khokher and Khan (2005) found the overall rate of suicidal ideation to be 31.4%. While there was no significant difference between genders, more females (33%) than males (29.2%) responded positively. Respondents belonging to single parent families and those living at home, compared to those using hostel facilities, reported higher rates. The findings of such studies can contribute to our understanding of the
suicidal process in the Pakistani population and to address it at various levels.

Laukkanen, Honkalampi, Hintikka, Hintikka, et al (2005) reported that suicidal ideation in boys associated with being bullied at school and talking about one's problems only with friends, and in girls with a negative attitude towards the future and a negative self-image of one's own mental health.

Ulusoy and Demir (2005) revealed that there are statistically significant relationships among gender, cigarette smoking, school achievement, anxiety/depression and suicidal ideation.

Van Heeringen (2001) demonstrated that up to 24% of adolescents (aged 15-19 yrs) have experienced suicidal thoughts at some point in their lives. Rates of attempted suicide are highest among young people, and increased occurrence is reported, particularly among young males. A similar picture emerges with regard to completed suicide and in some countries rates of suicide among young males are higher than those for older age groups. Risk factors can be developed, in which 3 criterion can be discerned: i.e., trait-dependent factors; state-dependent characteristics such as depression and hopelessness; and threshold factors, which may have a risk-enhancing or protective effect, such as social support, contagion effect, the availability of means, and the accessibility of mental health care. Preventive actions need to be developed, targeting the general population through, for example, educational programmes or population at particular risk such as adolescents, attempting suicide.

McClure (2001) found that there has been a substantial increase in suicide rate between the 1970s and 1990s for males aged 15-19 years. The increase was associated with an increase in self poisoning with vehicle exhaust gas in the 1990s. Although there was a slight decrease in the official suicide rate for females aged 15-19 years, 'undetermined' deaths increased. There is no indication of a major change in suicide
rate in 10-14-year olds. It is concluded that the substantial increase in suicide rate in 15-19-year-old males may indicate increased psychosocial stress, particularly affecting this group.

Tortolero and Roberts (2001) indicated that ethnicity plays an important role in suicidal ideation but the mechanism remains unclear.

Brener, Hassan and Barrios (1999) showed that students who had considered suicide were at increased odds of using tobacco, alcohol, and illegal drugs. These results suggest that colleges and universities should establish suicide prevention programs that also address the related problem of substance use.

Brent, Baugher, Bridge, Chen and Chiappetta (1999) found that the increased rate of suicide in older vs younger adolescents is due in part to greater prevalence of psychopathology, substance abuse, and greater suicidal intent in the older population. The increased rate in males is less easily explained, but it may stem from method choice and the greater prevalence of and risk conveyed by conduct disorder of males.

Heisel and Fusé (1999) demonstrated a significantly higher prevalence of suicide ideation among Japanese students as compared to their Canadian counterparts. Japanese students were also significantly more likely to have previously attempted suicide and to have formulated a suicide plan, and were far less likely to have sought assistance from mental health care practitioners. The results indicated that suicide ideation was more strongly associated with psychological variables among Canadian than among Japanese participants, supporting cross-cultural research on depression. Finally, the results manifested the need for better differentiation of important predictors of suicide ideation cross-culturally and the development of both mental health education programs and outreach programs designed to help distressed individuals who are reluctant to seek help.
Collins and Paykel (2000) examined whether student suicide rates remain high and whether examination times pose a particular risk. Suicide rates were similar to those seen amongst 15-24 yr olds in the general population. Examination times were not associated with excess suicide. It is concluded that suicide rates in University of Cambridge students do not appear to be unduly high.

Werenko, Olson, Fullerton-Gleason, Lynch et al (2000) found that the suicide death rate in New Mexico is consistently higher than the national rate. Among adolescents, suicide is the 3rd leading cause of death nationally, but in New Mexico it is the 2nd leading cause of death. This study describes the pattern of child and adolescent suicide deaths in New Mexico. Rates for ages 5-9 yrs (0.2), 10-14 yrs (3.8), and 15-19 yrs (22.3) are over twice the US rates. Suicide deaths resulted primarily from firearms (67%), hanging (16%), poisoning (6%), inhalation (4%), and other methods (7%). Over one-third of decedents (41%) experienced mental disorders, primarily depressed mood and clinical depression. Previous suicide attempts were noted for 15% of the descendents.

2.2.3 Suicidal Behaviour of Patients

Pillay, Wassenaar and Kramers (2001) showed that the majority of subjects engaged in suicidal behaviour during the weekend. Significantly more adolescents than adults ingested medicinal substances, and significantly more adults than adolescents used violent methods in their non-fatal suicidal behaviour. Interpersonal conflict was cited as a short term precipitant to non-fatal suicidal behaviour in most of the cases. Financial stressors and employment difficulties were predominantly cited as recent stressors to non-fatal suicidal behaviour among adults.

Gil (2003) showed that suicidal ideation was explained by the combination of the 5 personality traits of impulsiveness, stoic rigidity,
confidence, disorderliness and, indirectly, pessimism through confidence and rigidity.

Wallin and Runeson (2003) revealed that students with such a history of suicide thoughts were less optimistic about the possibility to help. Ongoing depressive/anxious symptoms were prevalent in 12% of students, but did not seem to affect their attitudes to patients. Female students had sought psychological/psychiatric help more often than males (26% and 10%, P < 0.01).

Horesh, Zalsman and Apter (2004) showed low self-disclosure levels are associated with suicidal thinking, suicide attempts, and suicidal attitudes. Thus, low self-disclosure may well be a risk factor worthy of further evaluation in the attempt to understand adolescent suicidal behavior.

DiFilippo and Overholser (2000) found that self-reported depressive symptomatology remained the strongest predictor of suicidal ideation, regardless of its order in the regression analyses. Prevention and treatment efforts may focus on mother-adolescent attachment and peer attachment (particularly in girls) to reduce risk for depression and suicidal ideation.

Prinstein, Boergers, Spirito, Little, et al (2000) supported a model in which greater levels of perceived peer rejection and lower levels of close friendship support were associated directly with more severe suicidal ideation. In addition, indirect pathways included deviant peer affiliation and global family dysfunction related to suicidal ideation via substance abuse and depression symptoms.

2.2.4 Suicide, Suicidal Ideation and Attempted Suicide

Kuo, Gallo and Tien (2001) depicted that persons in the youngest age group, in the lowest socioeconomic status and previously married persons were at increased risk for non-fatal suicidal behavior during
the follow-up interval. Psychiatric disorders, especially depression and substance abuse, were associated with new-onset of non-fatal suicidal behaviour. Suicidal ideation is common and important antecedent to suicide attempts deserves more attention in community and general medical settings.

Hintikka, Pesonen, Saarinen and Tanskanes (2001) was of the opinion that suicidal ideation and the severity of depression are associated strongly. Over half of the men and women who had previous suicidal ideation had not visited any health services for help with psychological distress during the 12 month follow-up period. Daily smoking was associated with a decreased probability of recovery from suicidal ideation.

Rew, Thomas, Horner, Resnick, et al. (2001) found that the significant variables for the 3 ethnic groups combined were stress, internalizing and externalizing behaviors, physical and sexual abuse, family and friend attempted suicide, social connectedness, and religious influence.

Joiner (2002) suggested two psychological processes—cognitive sensitization and opponent processes—that may partly explain the link between past and future suicidal behaviour.

Hesketh, Ding and Jenkins (2002) showed that one-third of the subjects had suffered symptoms of severe depression. Factors independently associated with severe depression were female gender, poor self-reported academic performance, and rural residence. Depression was less common in female without siblings. Patterns of help-seeking showed reliance on friends and parents with very low levels of professional help-seeking (around 1%) and having sought no help from any source for psychological problems.

Perez-Smith, Spirito and Boergers (2002) found that adolescents who lived in neighborhoods with weak social networks reported higher levels of hopelessness, even after controlling for SES and depression. These
preliminary findings suggest that environmental context may play a role in the emotional status of adolescents who attempt suicide.

According to Sayil and Devrimci-Ozguven (2002) the rates of attempted and completed suicides per 100,000 inhabitants over 15 years of age were 31.9 for males and 85.6 for females, and 9.9 for males and 5.6 for females, respectively. The majority of attempted suicides were in the 15-24-year-old age group, as is the case in all other European countries. The majority of completed suicides were also in the 15-24-year-old age group, although in other European centers most completed suicides occur in the 40+ age group. The most frequent methods were overdose for attempted suicide and hanging for completed suicide. It is concluded that male sex is a risk factor for completed suicide and female sex is a risk factor for attempted suicide, while an age of 15-24 years may be a risk factor for both groups.

Wichstrøm and Rossov (2002) was of the opinion that more girls (10.4%) than boys (6.0%) reported a previous attempt and more girls (3.3%) than boys (1.9%) reported an attempt during the study period. There was no gender difference in future attempts when previous attempts, depressed mood, physical appearance, pubertal timing, and romantic involvement were controlled.

Johnson, Cohen, Gould, Kasen, et al (2002) suggested that maladaptive parenting and childhood maltreatment were associated with an elevated risk for interpersonal difficulties during middle adolescence and for suicide attempts during late adolescence or early adulthood. Thus these interpersonal difficulties may play a pivotal role in the development of suicidal behavior.

Carter, Issakdis and Clover (2003) found that for Attempted Suicide (AS) the results were: anxiety (OR=9.4, CI = 1,752.8) or substance-use disorder (OR= 3.0, CI = 1,18.7) and greater mental health disability (OR=0.5, CI = 0.40.7). Affective disorder was close to significant for the AS group (OR=4.0).
Giotakos (2003) found that individuals with suicidal ideation or behavior showed a significantly lower sense of coherence questionnaire score. The comorbidity of past and current suicide thoughts and substance use ranged from 16.4% to 33.3% and 31.4% to 44.2%, respectively, depending on the kind of the substance. Finally, the subjects with past or current substance use had a significantly higher incidence of past or current, respectively, suicidal ideation or behavior, as compared with those without a history of substance use.

Martinac, Šakić, Skobic and Jakovljević (2003) showed some form of suicide ideation in 9.16% of medical students including 4.4% of 1st yr students, 8.4% of 2nd yr students, 9.1% of 3rd yr students, 3.6% of 4th yr students, 13.6% of 6th yr students and 2.2% of hospital physicians.

Tyssen, Hem, Vaglum, Grønvold, et al. (2004) found that the adjusted predictors of transition from thoughts to planning were reality weakness trait, severe depressive symptoms, and a low level of perceived medical school stress. Common predictors for both postgraduate suicidal planning and transition from thoughts to planning were depressive symptoms and personality traits. Reality weakness was the most decisive trait for aggravation in suicidal ideation.

Besançon (2004) was of the opinion that the risk factors classically include a past suicide attempt, mental disturbances, an addiction, personality traits, and the environment. An event felt as a loss is also regarded as a risk factor but is best observed by near relations. Usually, such an event is followed by behavior changes.

Jobes, Nelson, Peterson, Pentiuuc, et al. (2004) examined a range of open ended qualitative written responses made by suicidal outpatients to five assessment prompts from the Suicide Status Form (SSF) – psychological pain, press, perturbation, hopelessness, and self-hate. Among a range of specific exploratory findings, one general finding was that two thirds of the 636 obtained written responses could be reliably
categorized under four major content headings; relational (22%), role responsibilities (20%), Self (15%), and unpleasant internal states (10%).

Séguin, Lynch, Labelle and Gagnon (2004) found that both suicidal groups reported greater personal vulnerability and perceived their family as less functional than did the non-suicidal group. However, no differences were found between both suicidal groups. The results suggest the presence of common factors in both adolescent suicidal ideators and attempters.

Cox, Enns and Clara (2004) reported that brief indices of self-criticism and hopelessness were robustly associated with suicide attempts across all three time frames. The results support the value of examining psychological individual differences over sociodemographic and psychiatric diagnoses alone in the comprehensive assessment of factors associated with suicidality in the general population.

LeMaster, Beals, Novins, Manson (2004) indicated that suicidal behaviors were most frequently reported among females than males and among younger respondents than older respondents. In addition, suicidal behaviors were associated with depressive disorders, PTSD, substance abuse/dependence, and violent ideation/aggression. Results underscore the importance of effective and acceptable alcohol, drug, and mental health services in reducing the rates of suicidal behaviors in American Indian communities.

According to Gunnell, Harbord, Singleton, Jenkins, et al (2004) the annual incidence of suicidal thoughts was 2.3%. Incidence was highest in women and among 16-to-24-year olds. Increased incidence was associated with not being in a stable relationship, low levels of social support and being unemployed. Fifty-seven per cent of those with suicidal thoughts at baseline had recovered by the 18-month follow-up interview.
According to Wild, Flisher and Lombard (2004) depression and low self-esteem in the family context were independently associated with suicide ideation and attempts. Moreover, low family self-esteem significantly differentiated suicide attempters from ideators. Screening for depression and low self-esteem in the family context is discussed as a possible strategy for helping to identify adolescents at risk for suicide attempts.

Préville, Boyer, Hébert, Bravo, et al. (2005) showed that only 8.1% had a severe level of functional limitations at the time of their death. This result leads us to interpret with caution the conclusion of some studies suggesting that physical frailty is a major causal factor associated with suicide among the elderly.

Shneidman (2005) believed that each case of suicide has its own unique constellation of factors including, at its centre, the vital role of idiosyncratically defined psychological pain, which itself is pushed by a pattern of thwarted psychological needs that is special for that particular person. Suicide is not best understood as a disturbance in the genes of the brain; rather, it is essentially a perturbation in the mind. Psychological pain is the introspectively-felt distress of the negative emotions—fear, shame, anxiety, rejection, threat, guilt, unhappiness etc. The black heart of suicide is "psyache". Reduce the inner pain below a certain limen and the raison d'être for suicide is removed.

Stewart, Kennard, Lee, Mayes et al. (2005) found that self-efficacy was a weak unique predictor of suicidal ideation in both cultures. Hopelessness was the strongest of cognitive variables in concurrent associations with suicidal ideation in bivariate and multivariate models, in both cultures, and in both boys and girls.

Locke and Newcomb (2005) found that the strongest protective factor for suicidality was problem-solving confidence, followed by a good relationship with parents and being law abiding. The strongest risk
factor for suicidality was emotional abuse, followed by hard drug use, mother's alcohol-related problems, and sexual abuse.

Minot and Geller (2005) presented a personal account of his experiences related to suicide attempts and discusses the availability of mental health resources and his transition from suicide attempter to suicide-prevention advocate.

According to Cheng, Chen, Chen and Jenkins (2000) five major risk factors (loss event, suicidal behavior in first-degree relatives, major depressive episode, emotionally unstable personality disorder and substance dependence) were found to have independent effects on suicide from multivariate conditional logistic regression analysis.

Kelleher, Keohane, Corcoran, Keeley, et al (2000) showed that in the 15-44 age group the male female ratio was 4:1; in those over 45 the ratio was almost equal, males were more likely to be unmarried even when age differences were taken into account. All the women and all but seven of the men had a psychiatric diagnosis, but women were more likely to have received medical treatment in the year before their suicide than men. 37 had made at least one previous suicide attempt. Findings point to the need to improve recognition of the psychological distress and find effective methods to reduce parasuicide.

O'Shea, Stoke and Falvey (2000) concluded that reduced access to lethal methods (historically, from barbiturates to modified vehicle exhaust systems and paracetamol), attention to social factors (such as alcohol availability and employment levels) and clinical vigilance, coupled with adequate treatment of psychiatric disorders and close follow-up, should help to reduce suicide rates. Wilder cultural issues (e.g., religion) are poorly understood and require further research.

Simon and Crosby (2000) showed that the 15% of attempters who did report planning were as likely to receive medical treatment after their attempt as the attempters who did not report planning. All attempters,
regardless of planning, were at high risk for fighting. Additional effort is needed to understand and prevent unplanned suicide attempts.

Apter, Horesh, Gothelf, Graffi and Lepkifker (2001) found that the lack of willingness for self-disclosure significantly differentiated the serious attempters from the suicide ideators and mild attempters. This preliminary study indicates that self-disclosure may be a promising field for assessment, therapy, and prevention in suicidal patients.

Pirkis, Burgess, Meadows and Dunt, (2001) concluded that suicidal persons reported a range of needs especially for counseling, medication, and information. More than half of those with suicidal ideation and those who had attempted suicide who reported any needs felt that their needs had not been fully met. Suicidal person were significantly more likely to perceive that they had needs.

Scocco, Meneghel, Caon, Dello Buono and Deleo (2001) indicated that elderly people reporting suicidal feelings presented markedly higher levels of physical and psychological distress, such as depression, anxiety and hostility. Results indirectly confirm that depressive symptomatology was adequately treated.

According to Caine and Conwell (2001) suicide is a major public health problem, with rates rising to their highest levels in many countries and cultures during the second half of life. The risk factors that contribute to later-life suicide are distinctive from those in younger populations. It proposes that future effective measures will need to integrate public health and individual-oriented therapeutic measures, will to intervention, and that specific efforts will need to be developed to address the natural history of suicidal processes.

Gutirrez, Rodriguez and Garcia (2001) found that goodness-of-fit indices were adequate and supported the interactive effects of exposure, repulsion by life, depression, and history of self-harm on current ideation. Model fit for 3 subgroups based on race/ethnicity (
i.e., White, Black, and Hispanic) determined that repulsion by life and depression function differently across groups.

Stravynski and Boyer (2001) found strong associations among suicide ideation, parasuicide and different ways of being lonely and alone, defined either subjectively (i.e., the feeling), or objectively (i.e., living alone or being without friends). Moreover, prevalence of suicide ideation and parasuicide increased with the degree of loneliness. Only minimal differences between men and women were found.

Hawton, Clements, Sakarovitch, Slmkin et al. (2001) reported that the annual suicide rates in male and female doctors were 19.2 and 18.8 per 100,000 respectively. The suicide rate of female doctors was higher than in the general population, whereas the rate for male doctors was less than that of the general population. There were significant differences between specialties with anesthesia, community health doctors, general practitioners and psychiatrists having significantly increased rates compared with doctors in general hospital medicine. There is an increased risk of suicide in female doctors, but male doctors seem to be at less risk than men in the general population. The excess risk of suicide in female doctors highlights the need to tackle stress and mental health problems in doctors more effectively.

Deane, Wilson and Ciarrochi (2001) concluded that help-negation was suggested by higher levels of suicidal ideation being associated with lower help-seeking intentions. However, the negative suicidal ideation/help-seeking-intentions relationship was not explained by hopelessness or prior help-seeking. Help-negation appears to involve more than just negative expectations regarding the future. The discussion proposes social problem-solving orientation as one of a number of potential explanatory variables.

Beautrais (2001) identified the following risk factors that were common to suicide and serious suicide attempts: current mood disorder; previous suicide attempts; prior outpatient psychiatric treatment;
admission to psychiatric hospital within the previous year; low income; a lack of formal educational qualifications; recent stressful interpersonal, legal and work-related life events. Suicides were more likely to be male; older; and to have a current diagnosis of non-affective psychosis. Suicide attempts were more likely than suicides to have a current diagnosis of anxiety disorder and to be socially isolated.

Dieserud, Roysamb, Ekeberg and Kraft (2001) indicated a 2 path model of suicide attempt. The 1st path began with low self-esteem, loneliness, and separation or divorce, which advanced to depression, and was further mediated by hopelessness and suicidal ideation which led to suicide attempt. The 2nd path developed from low self-esteem and a low sense of self-efficacy and advanced to suicide attempt, mediated by a negative appraisal of one’s own problem-solving capacity, and poor interpersonal problem-solving skills.

King, Schwab-Stone, Flisher, Greenwald, et al (2001) found associations with stressful life events, poor family environment, parental psychiatric history, low parental monitoring, low instrumental and social competence, sexual activity, marijuana use, recent drunkenness, current smoking, and physical fighting. Low parental monitoring was independently associated with increased risk of suicidal ideation and attempts, even after adjusting for the presence of psychiatric disorder and sociodemographic variables.

Baca-Gareía, Diaz-Sastre, Basurte, Prieto, et al (2001) concluded that more than half of the attempts were impulsive (55%), approximately one-fourth of the attempts had an intermediate level of impulsivity (28%), and approximately one-sixth of the attempts were not impulsive (17%). There was an inverse association between the impulsivity and lethality of the suicide attempt. The most impulsive attempts tended to result in less morbidity, while the less impulsive attempts tended to be more lethal.
Tzeng (2001) concluded that participants suffered from "being trapped in a circle" through three main avenues: (a) being controlled by others versus striving to live for oneself (b) being rebuffed by others versus seeking company and being loved, and (c) wanting to leave family versus feeling responsible for family. These three themes were conceptualized under a broader theme of alienation versus connectedness. Cultural values, mientze (saving face), and hsiao (filial piety) influenced where those Chinese who had attempted suicide were located in the dimension between alienation and connectedness.

Wissow, Walkup, Barlow, Reid, et al. (2001) concluded that suicide is the second leading cause of death among American Indian youth. Elevated rates of suicide in Indian communities have been attributed both to outbreaks and to regional trends. Tribal and country suicide patterns differed by age distribution and method but not by gender.

Ahrens, Linden, Zäske and Berzewski (2000) was of the opinion that suicidal thoughts must be regarded as a symptom with the status of a disorder itself which should be handled as a comorbid condition if other mental disorders cooccur.

Wichström (2000) showed that future attempts were predicted by previous attempt, female gender, young age, perceived early pubertal development (stronger among girls), suicidal ideation, alcohol intoxication, not living with both parents, and poor self-worth. It is concluded that the importance that the clinician ask about previous suicidal behaviors is underscored. Early pubertal timing (particularly among girls), loss of self-worth, and alcohol intoxication may serve as risk factors for future suicide attempts.

Lyon, Benoit, O'Donnell, Getson, Silber and Walsh (2000) found that the threat of separation from a parental figure, neglect, substance abuse, suicidal ideation, and falling grades were the strongest predictors of suicide attempt. Unexpected findings included high levels
of truancy, threatening others, and separation from a parent before the age of 12 yrs among nonattempters.

Pirkls, Burgess and Dunt (2000) concluded that age, marital status, and disability were associated with ideation; marital status and employment status with attempts. Approximately 12% of ideators in the sample progressed to making an attempt; employment status was the only significant predictor. Reducing suicidal ideation and attempts requires a multi-faceted approach that targets those with mental illness but also adopts population-based strategies that address other factors, such as unemployment.

According to Hem, Grønvold, Aasland and Ekeberg (2000) physicians have a higher suicide rate than the general population or other academics. Lifetime prevalence ranged from 51.1% for feelings that life was not worth living to 1.6% for a suicide attempt. Risk factors were being female, living alone, and depression. Suicidal thoughts, however, were hardly attributed to working conditions. A high rate of suicide and a low rate of suicidal attempts support the hypothesis that physicians do not “cry for help”, but are inclined to act out their suicidal impulses.

Hultén, Wasserman, Hawton, Jiang, et al (2000) found that both having previous attempted suicide and using “hard” methods were significantly associated with increased possibility of being recommended aftercare. When individual centers were analyzed, large disparities of recommended care after suicide attempts were found and there were no uniform criteria of recommending care for young suicide attempters in Europe.

McClelland, Reicher and Booth (2000) found that matters relating to blame are referred to more frequently than any other issue (87% of notes). The implications of these findings, and for a general use of a discursive approach to suicide, are then discussed.
According to Vajda and Steinbeck (2000) the most frequently diagnosed disorders were depression (45.5%) and drug (34%) and alcohol abuse (27%). Variables predicting repetition within 12 months were drug and alcohol abuse, non-affective psychotic disorders, and chronic medical conditions/illness. A history of sexual abuse was almost significant. Findings suggest that adolescents most likely to re-attempt suicide within 12 months present with either conditions, or a history of sexual abuse.

Harwood, Hawton, Hope and Jacoby (2000) concluded that older men are at higher risk of suicide than women. Given the high proportion of drug overdose in the sample, effective strategies to prevent suicide in older people might include improving the prescribing of analgesics and antidepressants. Although older people at risk of suicide often consult their General Practitioner (GP) shortly before death. GPs may have difficulty identifying those at risk because of the high proportion of physical complaints.

2.2.5 Mood and Suicide
Reinecke and DuBois (2001) stated that findings are consistent with socio-cognitive, models that emphasize multifactorial and interrelated contributions of cognitive, social, and environmental factors to risk for emotional disturbance during adolescence.

Reinecke, DuBois and Schultz (2001) indicated that a negative problem orientation as well as an avoidant or impulsive problem-solving style were associated with less favorable scores on all of the latter measures, including greater reported suicidality. By contrast, associations were not observed between utilization of rational problem-solving skills and measures of either mood or suicidality. Structural equation modeling analyses reveal that the relationships found between the former measures of social problem solving and suicidality were mediated by more direct associations of less-effective social problem solving with both dysphoria/state-depression and hopelessness.
2.2.6 Coping, meaning in life, suicide

Hobfoll, Schröder, Wells and Malek (2002) hypothesized that both communal mastery and personal agency were expected to lead to active coping and well-being. Findings generally supported the communal versus individuals distinction, but neither construct was associated with antisocial coping.

Koivumaa-Honkanen, Honkanen, Koskenvuo and Kaprio (2003) concluded that the risk of suicide increased with decreasing happiness. The authors conclude that self-reported unhappiness is strongly associated with subsequent suicide in a long follow-up. Moreover, it seems to indicate also cumulative health hazards.

Neff (2003) concluded that self-compassion is an emotionally positive self-attitude that should protect against the negative consequences of self-judgement, isolation, and rumination (such as depression). Because of its non evaluative and interconnected nature, it should also counter the tendencies towards narcissism, self-centeredness, and downward social comparison that have been associated with attempts to maintain self-esteem.

Hovey (1999) reported that effective social support and high depression were significantly associated with elevated suicidal ideation. Further analyses indicated a significant interaction between social support and depression in predicting suicidal ideation, thereby suggesting that social support may serve as a protective factor against suicidal ideation during the acculturative process.

Granberg and Westerberg (1999) hypothesised that people abandon life when it is least difficult because of a disjuncture between experience and expectation.

Smith and Anderson (2000) showed that groups differed significantly on indices of negative support severity, positive support, and risk-level. Limited support was found for the proposed social support model.
2.2.7 Spirituality and Suicide

According to Garroutte, Goldberg, Beals, Herrell et al. (2003), commitment to cultural spirituality, as measured by an index of spiritual orientations, was significantly associated with a reduction in attempted suicide.

Hovey (1999) found no relationship between religious affiliation and suicidal ideation. Self-perception of religiosity, influence of religion, and church attendance, were significantly negatively associated with suicidal ideation. The influence of religion was a significant predictor of suicidal ideation. The present findings lend empirical support to the notion that high religiosity may play a protective role against suicide.

Nisbet, Duberstein, Conwell and Seidlitz (2000) concluded that participation in religious activities does appear to reduce the odds of the occurrence of suicide. This effect remains even after controlling for the frequency of social contact.

2.2.8 Deliberate Self Harm

Milnes, Owens and Blenkiron (2002) concluded that patients who reported insoluble problems experienced higher levels of hopelessness and more suicidal intent. There was significant correlation among the number of insoluble problems, hopelessness, and suicidal intent. It is concluded that people who undertake self-harm report insoluble relationship problems. The authors suggest that when assessing hopelessness and suicidal intent in self-harm patients, clinicians should ask about perception of insoluble problems.

Hawton, Zahl and Weatherall (2003) stated that following DSH there is a significant and persistent risk of suicide, which varies markedly between genders and age groups. Reduction in the risk of suicide following DSH must be a key element in national suicide prevention strategies.
Rodham, Hawton and Evans (2004) indicated that more adolescents who took overdoses than those who cut themselves said that they had wanted to die (66% versus 40.2%) and had wanted to find out if someone loved them (41.2% versus 27.8%). Female self-cutters were more likely than male self-cutters to say that they had wanted to punish themselves (51% versus 60.9%). More self-cutters than self-poisoners had thought about the act of self-harm for less than an hour beforehand (50.9% versus 36.1%). The authors conclude that there are differences between adolescents’ motives for overdoses and for self-cutting, and also gender differences in the reasons for self-cutting.

Crouch and Wright (2004) stated deliberate self-harm as a response to conflict or feeling distressed or angry. Adolescents competed to be a genuine self-harmer; this led to feeling a need to cause a certain level of damage when self-harming and to harm in secret. Seeking help was difficult.

Harriss, Hawton and Zahl (2005) revealed that suicidal intent at the time of self-harm was associated with risk of subsequent suicide, especially within the first year and among female patients.

Carter, Reith, Whyte and McPheerson (2005) concluded that patients who have escalating severity of self-poisoning episodes are at high risk of completed suicide.

Hjelmeland and Grohølt (2005) found that adults more often wanted to escape from unbearable thoughts or situations, or to receive care and attention. Adults also reported a slightly higher level of medical seriousness of the DSH act, more psychiatric problems, and substance abuse. The similarities between young and adult DSH-patients are striking. The differences found are mostly related to factors of age itself, such as cognitive immaturity, impulsivity, and lack of experience in enduring problems.
Fortune and Hawton (2005) concluded that rates of deliberate self-harm appear to be rising among young people. Risk factors associated with deliberate self-harm are becoming clearer and the evaluation of treatments is progressing.

Kokaliari (2005) revealed that self-injury serves as a form of control over feelings related to productivity and achievement, as a response to high expectations for autonomy and self-reliance, and in reaction to societal demands for performance.

Kinyanda, Hjelmeland and Musisi (2005) stated that hopelessness, global psychological distress, and state-anger, but not depression, were significantly associated with DSH. Both depression and hopelessness were significantly associated with suicidal intent independent of each other. Interventions for DSH in this population should include treatments for both depression and hopelessness.

Hawton, Fagg, Simkin, Bale, et al (2000) found an overall increase in number of DSH even more between 1985-1986 and 1994-1995. As in previous studies, the majority of adolescents had interpersonal problems and/or difficulties with studying or employment. Self-poisoning with paracetamol and paracetamol compounds became increasingly common such that by 1995 these were used in almost two-thirds of overdoses.

Harris (2000) stated that self-cutting was seen as a release, with relief occurring when the wound was found to be not life-threatening. A qualitative examination of motivation and interests of all parties reveals that self-harm acts possess situated internal logic, whereas professional tend to use rational logic in attempting to understand those who self-harm.

Tadros and Salib (2000) examined the methods of fatal self-harm (FSH) used by the elderly in contrast to those used by young adults. Results found that a significantly higher proportion of the elderly who fatally
harmed themselves did so by drowning and asphyxia in comparison to the younger age group, and significantly more women over the age of 60 completed acts of FSH by tying a plastic bag around the neck than those under the age of 60. The most common methods of suicide among elderly men and women were found to be hanging and self-poisoning by overdose respectively.

2.2.9 Parents and Suicidal Ideation

Wong, de Man and Leung (2002) Chinese adolescents who experienced their mothers as less warm and affectionate tended to suffer from greater suicidal ideation, with girls generally reporting higher levels of ideation than boys.

Flouri and Buchanan (2002) reported that suicide attempters were more likely to have been in trouble with the police, to report lower levels of parental interest and academic motivation, and to report suicidal ideation and using alcohol or an illegal drug when they feel stressed. They were also less likely to reside with both parents.

Lai and McBride-Chang (2001) indicated suicide ideation was found to be significantly associated with perceived authoritarian parenting, low parental warmth, high maternal overcontrol, negative child-rearing practices, and a negative family climate. It is noted that a positive family climate may act as a buffer against developing suicide ideation in adolescents.

Maine, Shute and Martin (2001) discussed that after the video, parents' knowledge of suicidal signs, responses toward a suicidal person, and intention to help improved. Their attitude was more rejecting of suicide. Knowledge and intentionality predicted responses to suicidal statements.
2.2.10 Suicide Rates

Phillips, Li and Zhang (2002) estimated that a mean annual suicide rate of 23 per 100,000 accounted for 3.6% of all deaths in China and was the fifth most important cause of death for rural women, the eighth most important cause for urban women and men, and the fourteenth most important cause for urban men. The toll was particularly high in individuals aged 15-34 yrs. accounting for 18.9% of such deaths. Rural suicide rates were three times higher in both sexes, for all age-groups, and over time. Suicide is a major health problem for China; this public-health issue demands intervention development for high risk groups.

Hrdina (2002) asserted that it is unlikely that something as complex as suicidal behavior is genetically determined by a single gene or even a few variants.

Mayer (2003) reported that male suicide rates were associated with equal life expectancy for men and women. The Indian findings thus do not conform to patterns found in more developed economics. Given increasing human development in India, it seems probable that suicide rates in that country may increase two to three times over coming decades.

According to Gaillené (2004) Lithuania, among other Eastern European countries, has the highest suicide rates in the world. The suicide mortality of rural inhabitants, especially men, has been growing even more intensely, occurring twice as often as among their urban counterparts. When looking at the age factor, the highest suicide risk is for middle-aged men. Among the males aged 45 to 54 years suicide rate reach 154.6. The most common method of suicide remains hanging, both for males and females. The underlying reasons of the suicide spread in Lithuania are multi determined.
Shiho, Tohru, Shinji, Manabu, et al. (2005) reported that the suicide rate has increased gradually since the early 1990s, reaching a postwar peak in 1998. The number of suicides has remained at about 30,000 every year since 1998. Middle-aged (55-59 years) and elderly men have especially high suicide rates.

Bridges and Harrell (2005) stated that the overall state laws probably do not reflect the acceptance of suicide as a behavior by the general public.

According to Heled and Read (2005) most commonly cited were pressure to conform and perform, followed by financial worries, abuse and neglect, problems with alcohol or drugs, and boredom. Depression was cited by 5 percent and mental illness by only 1 percent. Recommended solutions included crisis support services located in schools and youth centers, youth activities, educational programs to assist young people to discuss feelings and to bolster self-esteem, and financial aid.

Pavia, Nicotera, Scaramuzza, Angelillo, et al. (2005) showed that age-specific rates of suicide were the highest in those 75 to 84 years old. Rates are always higher in males, with a tendency to stability or decrease in all age groups in the years observed, expect for males in the 45- to 64-year-old age range, in whom an increase from 5.71 to 7.28 was observed. The suicides increased proportionally with age, in those with the lowest level of education and among retirees. Hanging/suffocation and jumping from high places were the most frequently used methods of suicide. The study shows that suicide rates in Southern Italy are lower compared with national trends.

Rodrigues and Werneck (2005) revealed that suicide rates increased steadily with age, particularly among males. In both males and females, age-adjusted suicide rates decreased until 1992. In 1993, rates started to rise. Cohort effects showed that younger generations had significantly lower rates of suicide than older ones.
Schapira, Linsley, Linsley, Kelly, et al. (2001) found that demographic and social changes had taken place which would adversely affect suicide rates. However, a dramatic fall was found in the rate for women, and a modest decline in that for men. Reduced exposure to carbon monoxide and to barbiturates coincided with the fall in rates.

Lubin, Glasser, Boyko and Barell (2001) highlighted the need for further studies to identify both sub-population at high risk for suicide, and societal trends such as life-styles, immigration, military service, and media exposure to violence as first steps toward planning of intervention programs to reduce suicide rates.

Amos, Appleby and Kieman (2001) highlighted that the overall population suicide rate (all methods) also fell but there was no overall change in suicides by young males or females. In these groups suicide by hanging increased. Legislation on catalytic converters appears to have contributed to a fall in car exhaust suicides. However, the effect on overall suicide rates in young people has been reduced by method substitution.

Femquist (2001) reported that during the past couple of decades, individuals (aged 15-64 yrs) in eight Western European countries (Belgium, Denmark, England and Wales, Federal Republic of Germany, France, Ireland, Italy and the Netherlands) were asked about their attitudes toward the unification of Western Europe. Cross-sectional time series analysis reveals that the attitudes individuals hold toward such an event are significantly related to suicide rates. Although Durkheim’s theory of political integration focuses on events within a given country, the research herein finds political integration exists on an international level as well. A reformulation of Durkheim’s theory of political integration is put forth.

Lester (1999) showed that the factors of marriage and year had high predictability loadings. The results show that the predictors of suicide
rate among those aged 5-14 years differs from those of the total suicide rate.

Madge (1999) reported that the rates of suicide for those under 20 years are lower in England and Wales than any of the other countries studied. Trends showed varying patterns. Methods used in deaths recorded as suicide differed by country but there were also consistent trends.

McClure (2000) highlighted that suicide rates decreased in both genders between 1975 and 1990, while the rate for females continued to fall. Between 1990 and 1997, the rate decreased for males and females in all age groups, particularly for those using motor vehicle exhaust gas; the latter finding is associated with increasing use of catalytic converters.

Kryzhanovskaya and Pilyagina (1999) pointed to the importance of appropriate monitoring of suicides and attempted suicides and illustrate the necessity of collecting the information and of developing The Ukraine National Program on Suicide Prevention.

2.2.11 Suicide and Prevention

De Leo (2002) highlighted that both risk and protective factors may vary remarkably in different cultures. The need for an integrative approach is evident today more than ever, and this fact calls for more concerted and coordinated, multidisciplinary approaches to suicide prevention.

Hall, Mant, Mitchell, Rendle, et al (2003) showed that in older age groups, rates of suicide decreased substantially in association with exposure to antidepressants. The increase in antidepressant prescribing may be a proxy market for improved overall management of depression. If so, increased prescribing of selective serotonin reuptake
Inhibitors in general practice may have produced a quantifiable benefit in population mental health.

Askland, Sonnenfeld and Crosby (2003) found that depression and poor social functioning were associated with an increased risk of suicidal ideation. Poor social functioning and school adjustment were associated with an increased risk of suicide attempts.

Kalafat (2003) discussed that two comprehensive programs reported reduced suicide rates in targeted countries subsequent to program dissemination.

Isacsson and Rich (2003) suggested that depression is a necessary cause of most suicides and effective suicide prevention must focus on improving identification and treatment of depression in the population.

De Leo (2003) pointed out that apart from the depression, religious, cultural and social factors also play very relevant roles in suicidal behaviour.

Kelly, Ansari, Rafferty and Stevenson (2003) showed that in the younger group there was no association between antidepressant prescribing and suicide. For the older group, increased antidepressant prescribing was associated with a reduction in suicide rate over the 10 years of the study.

Francis (2003) presented an overview of the issues and the solutions that seek to address the ethical guidelines of the counseling profession and the university's goal of a safe learning environment. Solutions are applied to the creation of policies for dealing with suicidal students.

Beautrais (2005) noted that it is timely to outline, albeit briefly, the small body of evidence about programs and strategies that show effectiveness, or promise of effectiveness, in reducing or preventing suicide.
Wingate, Van Orden, Joiner, Williams, et al (2005) suggested that treatment of suicidality for individuals with problem-solving skill deficits may be most effective by targeting these deficits rather than capitalizing on strengths.

Goldney (2005) provided persuasive data that suicide prevention is possible. This is achievable by the application of broad community and professional education programs, as well as by the optimum management of mental disorders.

Leenaars, Cantor, Connolly, EchoHawk, et al.(2000) concluded that controlling the environment may be a viable strategy for preventing suicide, although research shows that few clinicians implement such approaches.

Gould and Kramer (2001) contended that the next generation of evidence-based prevention practices should include a focus on multiple risk factors, since it is generally recognized that suicide has many causes that are probably interactive. Evaluation protocols, designed at the inception of a prevention program, should be an integral component of any program.

Gould and Kramer (2001) concluded that the literature on evidence based prevention strategies can be grouped into case-finding approaches, with referral and treatment components, and risk factor reduction. These include school-based awareness curricula, screening, gatekeeper training and crisis centers and hotlines. Risk reduction involves restriction of lethal means, media education, postvention/crisis intervention, and skills training.

Shaffer and Pfeffer (2001) was of the opinion that crisis hotlines, method restriction, educational programs, and screening case-finding suicide prevention strategies are examined, and the clinician is advised on media counseling. Intervention in the community after a suicide, minimization of suicide contagion or imitation, and the training of
primary care physicians and other gatekeepers to recognize and refer the potentially suicidal child and adolescent are discussed.

Paulson and Everall (2001) showed that subjects were at greater risk for suicidal behavior when experiencing: (1) major negative life events, such as divorce, death, or extreme difficulty in school; (2) many daily stresses that contributed to feeling overwhelmed; (3) few or no social supports. Subjects reported that teachers' negative reactions often made it more difficult to cope with suicidal thoughts and feelings, whereas supportive teachers' reactions eased the pain of their distress. Factors helping to overcome suicidal tendencies include: (1) developing feelings of self-efficacy and personal worth through increased coping and problem-solving skills; (2) increased social support; and (3) feeling accepted despite experienced difficulties.

Joiner, Pettit, Perez, Burns, et al (2001) found that patients prone to positive moods, as compared with those less prone to such moods, displayed more positive problem-solving attitudes following treatment for suicidal symptoms, and, partly as a function thereof, displayed enhanced treatment response. These findings suggest that clinicians may improve their chances of achieving successful treatment outcomes if they present skill-building treatment during a windows of positive mood for the client, rather than in times of crisis.

Truscott, Evans and Knish (1999) proposed that counselors attend to two key dimensions of these situations: the strength of the therapeutic alliance and the degree of suicide risk. Therapeutic actions are then directed toward strengthening the alliance, and toward implementing other risk-reduction interventions only when the risk cannot be adequately reduced via the alliance.

Orbach (1999) was of the opinion that the cognitive approach asserts that emotional disturbances and coping are directly attributed to one's cognitive modes of functioning and that changing deficient cognitive functioning will result in a general improvement in affect and behavior.
When looking for effective intervention methods, the complexity of suicidal behavior and depression among youngsters should be reconsidered with more appreciation and sincerity, rather than looking for the simplest solution only because it is easily available and cost-effective.

Lester and Young (1999) stated that the counselor has rich possibilities for intervention, especially if belief in locus of control is explored along with feelings of powerlessness and helplessness.

Simmons, Peterson, & Hale (1999) highlighted that the Kitsap County community is integrating the data from this study into a community-based educational effort to reduce suicide deaths to no more than 10.5 per 100,000 residents.

Hough and Lewis (2000) reports on the activities of the Suicide Prevention Advisory Group (SPAG) formed by the Psychiatry Department of the Tripler Army Medical Center, Honolulu, Hawaii. Recommendations of SPAG included education for medical health care providers and the community at large, redefinition of admission criteria, improved communication with outlying clinics, separation of administrative and treatment functions, enhanced management of suicide inpatients, clarity of documentation, improved supervision of seniors, increased supervisory skills, training on suicide patient management, and improved inpatient social work resources. No suicides occurred in the 22 months following implementations of all recommendations.

2.2.12 Suicide and Family History

Roy (2002) was of the viewpoint that further studies of the relationships of a family history of suicide to personality are needed in other populations and incorporating biological measures.
Hawton, Haw, Houston and Townsend (2002) investigated whether there are differences between the characteristics of deliberate self-harm (DSH) patients with and without a family history of suicidal behavior. Results show 52 (35.6%) patients had a family history of suicidal behavior. Patients with a family history of suicidal behavior appears to be associated with greater anger. Absence of other association suggests that family history probably has less implication for individuals who have already engaged in DSH than in contributing to initiation.

Madu and Matla (2004) found that conflict in a family was a significant correlate for three forms of suicidal behaviors studied; family independence, family cohesion and family organization were also indicated as significant correlates for suicidal threats, however, family independence and organization correlate negatively with suicidal threat.

According to Kim, Seguin, Therrien, Riopel, et al (2005) suicide has a familial component independent of psychopathology that may be mediated by a combination of factors, including more severe suicidal ideation and aggressive behavior.

2.2.13 Violence and Suicide
According to Vermeiren, Ruchkin, Leckman, Deboutte et al. (2002), suicidal ideation and deliberate self-harm were both related to violence expression. The gender-specific influence of depressive symptomatology and aggressive behavior on the association between exposure to violence and suicidal behavior suggests the need for further research.

2.2.14 Personality, Stress and Suicide
Bartlett, Gunnell, Harrison and Moore (2002) stated that suicide rates, though important in themselves, are not reliable indicators of the levels of neurotic symptoms or stress in populations. Suicide rates are more strongly associated with area-based measures of social disadvantage, though a possible stress-suicide relationship in women could be investigated further.
Kerby (2003) suggested that increased suicidal ideation was associated with high Neuroticism, low Extraversion, and low Agreeableness. Low Conscientiousness was correlated with suicidal ideation in unit-aggression.

Enns, Cox and Inayatulla (2003) found that neuroticism was associated with post treatment depression and suicidal ideation. After controlling for time 1 symptoms and neuroticism in multiple regression analyses, self-criticism was associated with post treatment hopelessness and depression. Baseline suicidal ideation and neuroticism were predictive of psychiatric readmission within 1 year of discharge.

Wilburn and Smith (2005) indicated that both stress and self-esteem were significantly related to suicidal ideation; low self-esteem and stressful life events significantly predicted suicidal ideation. A significant minority of the sample indicated having thoughts severe enough to be classified as clinical suicidal ideation.

Elliot and Frude (2001) showed that higher levels of hopelessness were associated with higher levels of stress. Level of hopelessness was also associated with the use of problem-focused but not with emotion-focused coping. Analyses of the interaction between stress and coping style suggest that these variables influence the level of hopelessness in an independent and linear fashion.

Weyrauch, Roy-Byrne, Katon and Wilson (2001) supported and amplifies a stress-diathesis model of suicide behavior. Accordingly, efforts to increase personal resilience in individuals who have "failed suicide" may be more effective at preventing suicide morbidity than simple stress-reduction measures alone.

Engström, Persson and Levander (1999) showed that the temperament profiles of suicide attempters and violent offenders were very similar, with high trait anxiety and very low socialization. Violent offenders displayed significantly higher social desirability. Suicide attempters
tended to have higher indirect aggression and monotony avoidance. Impulsiveness, verbal aggression, and inhibition of aggression were within the normal range in both groups.

Cavanagh, Owens and Johnstone (1999) stated that overall, cases had significantly more adverse life events (ALEs) than controls. The categories accounting for these differences were interpersonal family adversity and physical ill-health. Recent ALEs contribute to the increased risk of suicide even when age, sex and mental disorder are controlled for.

2.2.15 Suicide method

Pettit, Lam, Voeiz, Walker, et al (2002) discussed that a subjective sense of burdensomeness toward loved ones has been posited as a marker for high risk of suicide. High levels of burdensomeness toward loved ones was significantly and negatively correlated with lethality of suicide method among suicide notes. In addition, males were more likely than females to employ more lethal means of suicide.

Lester (2003) indicated no sex difference in the heights from which men and women jumped.

Gould, Jamieson and Romer (2003) was of the viewpoint that several studies have found dramatic effects of televised portrayals that have led to increased rates of suicide and suicide attempts using the same methods displayed in the shows. Recent content analysis of newspapers and films in the United States reveal substantial opportunity for exposure to suicide, especially among young victims.

Black and Lester (2003) examined the effects of gender, age and suicide method on the content of suicide notes. Results show that suicide notes written by subjects using violent methods contained less joy, less love for others, less humor (irony, and less thanks,) suggesting a greater amount of alienation from significant others. Suicide notes written by females showed less intra personal hostility, gave fewer instructions.
concerning final affairs, accepted less personal responsibility, and used fewer absolute terms than those written by males. No significant differences were found according to age, excepting more mention of ill health in the suicide notes of the older subjects.

According to Pirkola, Isometsä and Lőnnqvist (2003), disparities were found in characteristics of suicide completers using different methods. Intoxication suicides were more often female and had a history of both previous attempts and psychiatric treatment, whereas suicides by shooting were the opposite in character. Victims using vehicle exhaust gas were most frequently younger males who had experienced a recent interpersonal loss or other adverse event and committed suicide while intoxicated with alcohol.

Lester (2003) found that of the 132 suicide jumping from the Delaware Memorial Bridge from 1952 to the present, the majority were male and from Delaware. There were more suicides in the summer months than in the winter months.

Lester, Wood, Williams and Haines (2003) analysed a large sample of suicide notes from 262 suicides in Australia, which showed separated divorced suicides and suicides who abused alcohol were more likely to give love/romance as a precipitant for suicide while those who used gas (natural or car exhaust) were more likely to give depression and guilt as a motive.

Chan, Yip, Au and Lee (2005) indicated that people who completed suicide by the charcoal-burning method were more likely to have been economically active and physically healthy, and were less likely to have had pre-existing mental illness. Charcoal-burning suicide was associated with overindebtedness. Media reports were pivotal in linking overindebtedness and financial troubles with charcoal-burning. Thus the political economy of suicide by charcoal-burning illustrated how historical, socio-economic and cultural forces shaped the lived experience that preceded suicide.
Lindqvist, Jonsson, Eriksson, Hedelin et al (2004) suggested that limiting the availability of one method of committing suicide is reported to reduce the overall suicide rate.

Bennewith, Gunnell, Kapur, Turnbull et al (2005) was of the opinion that the most frequently used ligatures (ropes, belts and cable) and ligature points (beams, girders, lofts and trees) are commonly available in community settings, limiting opportunities for prevention. In only half the cases (52%) were victims fully suspended with both feet off the ground. Four percent had also taken an overdose.

Abrams, Marzuk, Tardiff and Leon (2005) desired to compare suicide methods used by elderly and younger adults. Associations between age and suicide method and place of occurrence were examined. Fall from height was more likely to have been used by individuals 65 or older than by those who were younger. Among persons who died by fall from height, those 65 or older were more likely than others to have fallen from buildings where they lived.

Stack and Wasserman (2005) indicated that African Americans are 2.24 times more likely than Caucasians to choose violent methods of suicide. Although they are less likely to own firearms, African Americans are more likely than Caucasians to choose violent methods of suicide.

Denning, Conwell, King and Cox (2000) concluded that women who commit suicide use less violent methods, such as drugs and carbon monoxide poisoning, than do men, who more often use violent methods such as guns and hanging. Data from a psychological autopsy study of 141 suicide victims (aged 21-92 yrs) were used to test the theory that women who commit suicide use less violent means because they are less intent on dying. Although women were significantly less likely to use a violent method than men, there was no difference in the lethality of their suicidal intent.
Chung and Leung (2001) investigated the incidence in Hong Kong of intentional carbon monoxide poisoning by burning charcoal in a confined space. Individuals who used this method were younger on average (mean, 39 years) than those who used the more common methods of jumping (mean, 47 years) and hanging (mean, 55 years). The author speculate that this form of suicide is becoming more prevalent because it has been highly publicized, it is easily carried out, and it is culturally acceptable.

Beautrais (2000) found that during the 2 decades, male youth suicide rates in New Zealand doubled. This increase was accounted for almost entirely by increased use of hanging and vehicle exhaust gas. The increased female suicide rate was also largely accounted for by increased rates of hanging and vehicle exhaust gas. In 1996 the majority of youth suicides were accounted for by these 2 methods: hanging and vehicle exhaust gas. Both methods are widely available and difficult to restrict, implying that limiting access to means of suicide is a strategy that is unlikely to play a major role in reducing suicidal behavior.

According to Kontaxakis, Havaki-Kontaxaki and Christodoulou (2000), the drugs used in the suicidal attempt in order of frequency were: anxiolytic (50%), Neurotics (15%), analgesics (14%), antidepressants (9%) etc. Overdosing who had a great number of tablets (≥ 30) more often suffered from Schizophrenic, had a history of previous suicidal attempt, had a concurrent somatic illness and immediate psychiatric hospitalization was recommended to them. Attempters using a small number of tablets (≤ 12) more often manifested suicidality disorders and management on out-patient basis was advised for them.

2.2.15.1 Firearm and Suicide: A number of studies signified the use of firearms in adolescent suicides:
Johnson, Krug and Potter (2000) found an association between divorce rates and youth suicide rates, firearm-related suicide among youths, and suicide rates among males. For a smaller sample of countries, an association was found between firearm availability and fire-arm-related suicide rates among youths and suicide rates among young males. Suicide subjects were significantly more likely to have a firearm in their home than controls. Conduct disorder and previous mental health treatment were also found to be independent risk factors for firearm suicide. It is concluded that limiting household access to firearms and identifying adolescents at high risk are likely to be successful in preventing adolescent firearm suicide (Shah, Hoffman, Wake and Marine, 2000).

According to Joe and Kaplan (2002) the rates and percentages of suicide by firearms increased significantly more among African-American males than among white males. During the 19-year period, firearms accounted for about 70 percent and 64 percent of all suicides among males aged 15-19 years and 20-24 years, respectively.

According to Noffsinger and Knoll (2003) suicide is the eighth leading cause of death among all age groups. Incidence of suicide has increased significantly among adolescents and young adults. Men and elderly persons are more likely to successfully commit suicide. Access to a firearm greatly increases the risk of suicide death. Also, persons with depressive disorders, substance use disorders, and psychotic disorders have a greatly increased suicide risk. Persons with co-morbid depression and substance use disorder are at particularly high risk for suicide.

Olson, Huyler, Lynch, Fullerton et al (1999) concluded that firearms accounted for 45.7% of suicides followed by ingested poisons (29.1%), hanging (10.5%), and others (7.7%), and inhaled poison (7.0%). Intimate partner violence was documented in 5.1% of female suicide deaths; in an additional 22.1% of cases, male intimate partner fought
with or separated from the decedent immediately proceeding the suicide. Nearly two-thirds had alcohol or drugs present in the blood autopsy.

Birckmayer and Hemenway (2001) showed that firearm ownership levels correlated with suicide rates among 15-24 year olds and 65-84 year olds. The findings suggest that if the relationship is causal, 10% fall in regional firearm ownership levels would lead to a 3.0% decrease in suicide rates.

According to Lubell, Swahen, Crosby and Kegler (2004) in 2001, suicide was the third leading cause of death among persons aged 10-19 years. The most common method of suicide in this age group was by firearm followed by suffocation (mostly hanging) and poisoning. During 1992-2001, although the overall suicide rate among persons aged 10-19 years declined from 6.2 to 4.6 per 100,000 population, methods of suicide changed substantially. This report summarizes the results of that analysis, which indicated a substantial decline in suicide by firearm and an increase in suicides by suffocation in persons aged 10-14 and 15-19 years. Suicide by firearms decreased in the male and female population. Suicide by hanging increased among youths of both sexes, and suicide by poisoning doubled in the female population. A decrease in firearm suicides was most noticeable in the under-25 age group, although it was in this same age group that the general suicide rate increased the most. The reduction of firearm suicides was not accompanied by a decrease in overall suicide rates (Caron, 2004).

2.2.16 Depression and Suicide

Csorba, Rózsa, Gádoros, Vetró et al (2003) found that the suicidal group had all made an unsuccessful suicide attempt and/or had had frequent suicidal thoughts during the 6 months prior to the study. The non-suicidal group had neither attempted suicide, nor had had suicidal thoughts during the previous 6 months.
According to Orbach (2003) the common aspects in all models include intense negative emotions, loss of self, surfeit of the negative. Other aspects appear in some of the models, but not in others (e.g., incompleteness, emptiness). The relevance of mental pain to treatment of suicidal people is discussed.

Valois, Zullig, Huebner and Drane (2004) revealed that poor mental health (past 30 days), poor/mental physical health (past 30 days), serious suicide consideration (past 12 months), planning for suicide (past 12 months), attempted suicide (past 12 months) and suicide attempt requiring medical care (past 12 months) were significantly related to reduced life satisfaction.

Lynch, Cheavens, Morse and Rosenthal (2004) supported a temporally predictive model in which negative affect intensity and reactivity lead to emotion inhibition, operationalized as an ambivalence over emotional expression and thought suppression, which in turn lead to increased presence of suicidal predictors, operationalized as hopelessness and suicidal ideation. These results suggest that suicide prevention efforts in older adults may be improved by targeting emotion inhibition in treatment, especially among affectively intense and reactive older adults.

Vijayakumar (2005) depicted that sixty one percent of the suicides in the world occur in Asia. The suicide rate of Asia has been calculated as 12/100,000. This is an underestimate as data is unavailable for 20.7% of the Asian population. Population-based studies on suicide in Asia reveal that 68.97% had diagnosable psychiatric disorders. Only 35-40% of suicides in India and China received the diagnosis of depression. The association between depression and suicide is less pronounced in Asia. Demographic and socio-cultural risk factors for suicide in Asia are different from Western countries but clinical factors appear to be more similar than different. Suicide is a major public and mental health
problem in Asia and there is an urgent need to develop effective national suicide prevention strategy in Asian countries.

Furr, Westefeld, McConnell and Jenkins (2001) indicated that 53% of the sample studied reported that they had considered committing suicide since beginning college. Suggestions for college mental health practitioners related to programming and psychoeducation are described.

Wällinder and Rutz (2001) described a male depressive syndrome which comprises a low stress tolerance, an acting-out behavior, a low impulse control, substance abuse and a hereditary loading of depressive illness, alcoholism and suicide.

Duberstein (2001) found that people who obtain low scores on an inventory measuring Openness to Experience are less likely to report suicidal ideation but more likely to take their own lives. Based on the premise that the expression of suicidal ideation can have adaptive consequences (e.g., by mobilizing family and treatment providers), it is hypothesized that people with major depression who are low in Openness may be at increased risk for completed suicide in part because they are less likely to feel, or report feeling, suicidal.

Gili-Planas, Roca-Bennasar, Ferrer-Perez and Bernardo-Arroyo (2001) found that 6.5% reported suicidal ideation; Mental disorders are the most important factor associated with suicidal ideation: medical illness seem to play a secondary role.

Alexopoulos, Bruce, Hull, Strey and Kakuma (1999) demonstrated that elderly patients with severe depression, poor social support, and history of serious suicide attempts have high suicide potential.

Frank and Dingle (1999) found that an estimated 1.5% of U.S. women physicians have attempted suicide and 19.5% have a history of depression. Those who were born in the United States, were not Asian,
had histories of cigarette smoking, alcohol abuse or dependence, sexual
abuse, domestic violence, poor current mental health, more severe
harassment, or a family history of psychiatric disorders were
significantly more likely to report suicide attempts or depression.
Depression was more common among those who were childless, had a
household gun, had more stress at home, drank alcohol, had worse
health, or had a history of obesity, chronic fatigue syndrome, substance
abuse, an eating disorder, or another psychiatric disorder and among
those who reported working too much, career dissatisfaction, low
control at work, and high job stress. Strata reporting higher rates of
depression tended to show higher (although usually nonsignificant)
rates of suicide attempts. Depression is approximately as common
among U.S. women physicians as among other U.S. women, but suicide
attempts may be poor.

Lester (1999) explored whether state or trait measures of depression
were more strongly associated with suicidal ideation. The results show
that depressive scores predicted current suicidal ideation while
depressive personality scores predicted prior suicidal ideation.

Lynch, Johnson, Mendelson, Robins et al (1999) was of the opinion that
greater pessimistic thinking at baseline predicted the development of
suicidal ideation one year later and the older a person was when he or
she first experienced depression, the more likely he or she was to report
remission from suicidal ideation one year following onset.

Lynch, Johnson, Mendelson, Robins et al (1999) indicated that clinical
variables associated with psychomotor retardation, a history of
dysthymia, a previous psychiatric inpatient stay, and being a "younger"
elder were related to greater suicidal ideation. Multivariate analyses
indicated that feeling guilty, sinful, or worthless was associated with
over 6 times greater odds of having suicidal thoughts. Results provide
evidence for clinicians of some of the "red flags" associated with the
presence of suicidal ideation among depressed older adults.
Brádvik and Berglund (2000) stated that in the male group, suicidal ideation “beyond one’s own will” was related to suicide. Female suicides who had made an attempt showed higher suicidal ideation than female suicides who had not. A substantial minority of the women (22%) committed suicide without showing any previous intent. Only 5% of the male suicides had shown no previous intent to commit suicide.

2.2.17 Aggression and Suicide
Conner, Duberstein, Conwell and Caine (2003) suggested that aggression confers risk for suicide. It is postulated that a subtype of aggression, reactive aggression, underlies the link with suicide with implications for suicide risk-recognition and prevention. It is hypothesized that partner-relationship disruptions amplify risk for suicide in the near term among reactive aggressive individuals, particularly those with psychiatric disorders, and preliminary evidence in support of this hypothesis is reviewed. It is also found that being jailed as a potential precipitant of suicide in reactive aggressive individuals.

Conner, Conwell, Duberstein and Eberly (2004) reported that general aggression was more strongly related to suicide in individuals under age 65. Aggression in the past month was also higher in Suicide than in Control subjects from the total sample but was not consistently higher across age and gender strata.

2.2.18 Gender Difference
Gmitrowicz, Szymczak, Kroplwnicki and Rabe – Jabłońska (2003) stated that about 37% of girls and 25% of boys reported suicidal ideation and about 11% and 5%, respectively, suicide attempts. Boys were more likely to attempts; make multiple suicide attempts. The relation between suicidal behaviour (SB) and history of psychiatric treatment was the same for both sexes. Boys with suicidal behaviour were significantly more often fascinated with death, and girls were significantly more often exposed to difficult family situations.
Allison, Roeger, Martin and Keeves (2001) indicated that moderate levels of depressive symptomatology can be associated with suicidal ideation (especially among young females) and that for those young people a suicide risk assessment is required.

Quan and Arboleda-Flórez (1999) reported that relative to elderly female suicides, elderly male suicides characteristically use guns to commit suicide, are single, live in rural areas, and have a lower frequency of previous suicide attempts. Physical illness and financial difficulty as precipitant stressors of suicide are significantly more frequent among males than females. Lethal methods of suicide, physical illness, and financial difficulty as precipitant stressors of suicide are more common among elderly males than females who commit suicide.

Eshun (2000) found significant main effects for cultural and gender for suicide ideation. Furthermore, gender and rumination together accounted for significant portions of the variance in suicide ideation scores. Although suicide ideation scores were higher for the US samples rumination and gender (together) accounted for statistically significant portions of the variance in suicide ideation for each cultural group.

2.2.19 Indian Studies in the field

The research findings from the Indian perspective may be described as follows:

Kumar (1975) reported that girls reported lack of adjustment, lack of self-confidence, feeling of inferiority as prominent problems, while the boys reported insecurity about future, heterosexual frustration, lack of social adjustment, feeling of inferiority as prominent problems.

Narang et al (2000) reported that 73% of the attempters were <30 years of age. Kessler et al (1999) reported that age <25 years is a significant risk factor for suicidal attempt among those with suicidal ideation.
No significant difference was found between male and female attempters, which is in concurrence with the findings of other Indian Studies (Sathyawathi et. al. 1961). However, Kessler et al (1999) found that more for suicidal attempt and suicidal ideation.

Another finding was that a higher number of single men and married women attempted suicide compared with married men and unmarried women (Srivastava and Kumar, 2005). This finding was in concurrence with that reported in previous studies (Sethi et. al. 1978, Gupta et. al. 1981, Ponnudurai et. al. 1986). Among attempters, students and housewives outnumbered the “others” group (Srivastava and Kumar,2005), which is in concurrence with the study by Narang et al(2000). This was also observed in the present study where attempters had a higher level of suicidal ideation and agitation (Malone et.al. 1993). Srivastava et al(2000) also reported a low positive relationship between severity of depression and suicidal intent.

Banerjee et al. (1990) studied the vulnerability of Indian women to suicide and found that in their sample two-third of the victims were below 25 years of age. In women the commonest cause of suicide was a quarrel with the husband and in men it was a quarrel with the parents. Poisoning with insecticides was the most common mode of suicide.

Kar et al. (1995) worked on adolescent suicide attempters and observed that there has been an alarming increase in the rates of suicide attempts by older children and adolescents. In their sample, 61.3% were in their late adolescence and females outnumbered males in the ratio of 2.1 : 1. The most prevalent psychiatric disorder was depression (29%) and all those diagnosed were in late adolescence. Attempters had more stressful life events within 6 months of the attempt in comparison to the control group. In 61% of suicide attempters the mortality was 50% or more.

Unni and Mani (1996) studying suicide ideators in a general hospital concluded that 59.74% of people had depression, 9.74% each had
substance abuse and psychosis, 7.14% had neurotic disorder and 0.65% had normal mental status. Sixty percent were housewives and the majority of ideators were in the age group of 16-45 years.

In another study, Sharma (1998) noted that 85.4% of the cases were in the age group of 15-34 years. Among suicide attempters, 53% were female and 52% unmarried. Thirty-two percent were housewives and 28% were students. A vast majority (74.7%) had consumed organophosphorus compounds. Psychiatric disorders (46.7%), quarrel with the spouse/in-laws (13.4%), quarrel with the parents (12%), and failure in love (10.6%) were some of the most common causes of attempted suicide while no cause could be determined in 14.7% of cases (Jain et al., 1999).

Ihanki et al. (1998) also revealed that attempts are more common among the younger population living in urban areas. Interpersonal problems act as precipitating agents.

Narang et al. (2000) found that attempt was more common in unmarried people. Lal and Sethi (1975) on the other hand found it to be more common in married persons. Thus interpersonal relations within the family network are of significance. Further in agreement with other researches (Paykel, et. al. 1974; Latha et al. 1996 and Sudhir Kumar et al. 2000), exposure to stressful life events in recent past was also found to be another significant risk factor associated with suicide attempt.

Albuquerque, Rao, Rao, Subbakrishna and Prabhu (1990) revealed that problem solving coping behaviour combined by wishful thinking were most common. The males and females did have significant differences in coping behaviours used by them, females mostly resorted to crying (63.55%) while boys resorted to making a plan of action (74.59%) or engaged in vigorous physical exercises (51.89%).
Dalai, Kapur and Subbakrishna (1990) indicated that prevalence rate is 30.92% based on GHQ. The disturbed group had higher scores on YSR (Youth Self Report) as well as more number of stressful life events. There was a positive and significant correlation between SLE and psychological disturbance and an inverse relation between adjustment and disturbance.

Gupta, Trivedi and Singh (1992) reported that analysis of personality profiles of both showed significantly higher representation of deviant personality pattern in repeaters (73%) than in non-repeaters (44%) among males and females.

Raj, Mishra, Seshadri and Kumaralah (1999) aimed to examine the effectiveness of CBT in reducing cognitive distortions, suicidal ideation, depression and anxiety and increasing problem solving skills in DSH cases. Results showed efficacy of CBT in significantly reducing dysfunctional attitude, hopelessness, depression, anxiety and suicidal ideation in all the DSH cases (Completed Ones) and follow up after 2 years showed maintenance of improvement.

Bhatia, Aggarwal and Aggarwal (2000) showed that ideators and completers were predominantly male whereas attempters were predominantly female. Over 60% of subjects were married. The majority of subjects were aged 26-35 years and were employed or were housewives. For suicidal ideators, mixed anxiety and depressive disorder was the most common psychiatric diagnosis, followed by schizophrenia and major depression. Among suicide attempters, adjustment disorder with depression was the most common diagnosis.

Khan and Reza (2000) found that men outnumbered women by 2:1. While there were more single than married men, the trend was reversed in women. The majority of subjects were under 30 years of age and “domestic problems” was the most common reason stated. More than half of the subjects used organophosphate insecticides, while psychotropics and analgesics were used infrequently. The study
challenges the widely held belief that suicide is a rare phenomena in an Islamic country like Pakistan, and underscores the need for more culture specific research on this important public health problem.

Thacore and Varma (2000) found a male to female ratio as 4:1 and average age was 43 yrs (range 16-86 yrs). 60% had associated psychiatric illness mainly affective disorders. Carbon monoxide self-poisoning accounted for 40%, firearms for 30%, and hanging, overdose, asphyxia and other methods, and their suicides were precipitated by interpersonal conflicts. Social and personal difficulties were associated in 33%, and triggering factors were present in 40%. Previous suicide attempts were present in 28%, while 12% had manifest behavior changes preceding suicides or verbalized their intent to suicide. Suicide rates in Ballarat were higher than the average overall Victorian and Australian rates. After a consistent decline over 4 yrs an increase occurred in 1996.

Sharma, Grover and Chaturvedi (2008) found that about 15.8% reported having thought of attempting suicide, while 5.1% had actually attempted suicide, both being more in females than in males. Significant associations were observed with the age of the student, living status of parents, working status of mother, and whether the student was working part-time. The two variables found significant on multivariate analysis were female gender and the number of role models the student had ever seen smoking or drinking. Thus the prevalence of suicide-risk behaviour was found to be quite high and is a matter that should evoke public health concern.

Chavan, Singh, Kaur and Kochar (2008) was of the opinion that 59.4% of suicide victims were in the age group of 20 to 29 years. Males slightly outnumbered females in this study. 57.4% of the subjects had migrated from other parts of India. Hanging was the most common method used by the suicide victims. Psycho-social stressors and psychiatric illness were found. 48.5% suicide victims sought treatment
prior to the attempt. As many as 57.4% of the subjects had shown behavioural change before the suicidal attempt. Thus specific focus in suicide prevention strategies should be on migrant population.

Chatterjee, Chakraborty and Choudhury (2007) found that patients who attempted suicide had significantly more past suicidal attempts, early insomnia, lack of insight and total depression score. Nonsuicidal group had more past depressive episodes. Males commit suicide more often than females. Unemployment was an important risk factor. Hanging was most common in males, while poisoning was common among females. 94% of suicide victims had at least one psychiatric illness. Depression was the most common diagnosis followed by alcohol use disorder. 58% of suicide completers had a past history of suicidal attempt. 40% had family history of mental illness and 16% had history of suicide in family members (Srivastava, 2007).

Thus suicide rates in India have witnessed an increase over the last two decades. In recent times, there were unfortunate incidents of suicide amongst diverse population groups. Such cases reflect the growing vulnerabilities with failing hopes and confidence and are a cause for serious concern. There are also significant changes in life styles and socio-familial support networks (Malhotra, 2007).

In Sum: Thus Suicide is an alarming problem in almost all the countries of the world, with varied methods being used by different age groups. The above literature survey highlights the relationship of suicide with different dimensions of one's life. Interventions are becoming multifaceted to reduce the odds of suicide which are on its rise.

2.3 AGGRESSION AND ITS ASSOCIATED FEATURES

2.3.1 Aggression and Related Aspects
Rapport, Denney, Chung and Hustace (2001) suggested that classroom performance and cognitive functioning thus appear to mediate the
effects of internalizing behaviours as well as intelligence. Particular attention to the presence and potential impact of social withdrawal on children's functioning, both alone and concomitant with anxiety/depression, appears warranted during the course of clinical evaluations.

Zeman, Shipman and Suveg (2002) indicated that the inability to identify emotional states, the inhibition of anger, the dysregulation of anger and sadness, and the constructive coping with anger predicted internalizing symptoms. The dysregulated expression of sadness and constructive coping with anger were inversely related to externalizing symptoms.

Jenson, Olympia, Farley and Clark (2004) indicated that without components of positive psychology it is very likely that schools will continue to lose these students, and at a significant cost to society down the road.

Loukas and Prelow (2004) showed that, as the number of risk factors increased, levels of externalizing and internalizing problems also increased. Furthermore, findings indicated that socioemotional competence was predictive of fewer externalizing and internalizing problems for females independent of the level of cumulative risk. Maintenance of family routines protected females exposed to elevated levels of cumulative risk from heightened levels of externalizing problems. Despite exposure to multiple risk factors, boys high in socioemotional competence and those boys reporting a good quality mother-son relationship were protected from elevated levels of adjustment problems.

According to Oldehinkel, Hartman, De Winter, Veenstra, et al.(2004) frustration is mainly being related to maladaptation in general (severity marker), and Fear and Effortful Control being associated with both the
severity and the direction of internalizing and externalizing problems, respectively. Girls and boys differed in the distribution across the problem groups, but the associations between temperament and psychopathology were comparable for both genders.

Lowenstein (2004) suggested that properly directed anger can lead to positive action and produce feelings of being in control of situations perceived to be threatening. On the other hand, there are a large number of negative repercussions with the feeling and expression of anger, i.e., negative psychological reactions such as increased blood pressure and heart rate. Anger appears to be age and gender related and is likely to be precipitated by a particular situation. Programs that are used early and long enough appear to promise good results in preventing further expressions of anger or internalized anger.

Salmivalli (2001) reported that instead of studying self-esteem as unidimensional continuum from “low” to “high”, qualitative distinctions should be made, for instance, between different types of unhealthy self-esteem, such as disparaging and underestimating self versus narcissistically refusing to see anything negative in oneself. It is the latter type which seems to be associated with aggressive behavior.

Mesman and Koot (2000) showed that temperamental withdrawal, parental internalizing psychopathology, and early single parenthood (for girls) were identified as correlates that are specific for internalizing problems, whereas temperamental high general activity level was identified as externalizing-specific. Further, parenting stress, poor school results (only for boys), and stressful life events (only for girls) were found to be common correlates of psychopathology.

2.3.2 Factors of Aggression

Shields and Pierce (2001) showed that subjects with more structured families, those exposed to less community violence, and those exposed to fewer family arguments reported higher levels of self-control. Positive
peer relationships were significantly related to less aggressive and violent behaviour.

Mesch, Fishman and Eisikovits (2003) suggested that experiencing negative relations during adolescence might be a risk factor predicting aggressive conduct.

Anderson and Murphy (2003) suggested that the violent video game effect on aggression was not mediated by instrumental aggressive motivation, but was partially mediated by revenge motivation.

Maxwell and Maxwell (2003) showed that child-witnessed and child-directed violence are positively and significantly related to self-reported aggression, that child-witnessed violence account for most of the variance in adolescent aggression, and that neither measures of family violence interacts with gender.

Krahe and Möller (2004) found significant relationships between attraction to violent electronic games and the acceptance of norms condoning physical aggression. Violent electronic games were linked indirectly to hostile attributional style through aggressive norms. The findings are discussed with respect to North American research as the aggression-enhancing effect of violent electronic games.

Uhlmann and Swanson (2004) suggested that playing violent video games can lead to the automatic learning of aggressive self-views.

Prinzie, Onghena, Hellinckx, Grietens, et al (2004) indicated that for the mother data, as well as for the father data, children’s Extraversion and Imagination were positively related to children’s externalizing problem behaviours. Children’s Benevolence and conscientiousness and parent’s Emotional Stability were negatively related to externalizing problem behaviours. For the mother data, maternal Agreeableness was positively related to externalizing problem behaviours too.
Muris, Meesters, Morren and Moorman (2004) showed that both attachment status and parental rearing behaviors accounted for a unique and significant proportion of the variance in anger/hostility. These findings are in keeping with the notion that family environment factors such as attachment style and parental rearing are involved in the development of anger/hostility in youths.

Goldsmith (2005) suggested that hostility and violence result in an overlay or complex when the dynamics of development of object relations are inhibited. Adolescence, which presents a recapitulation of the systemic, narcissistic, amoric, erotic, and altruistic mechanisms of object relations, becomes vulnerable to hostility and violence when it is cut off, as Erikson has demonstrated, from these mechanisms of object relations of so called self-identity within the context of generativity.

Loukas, Paulos and Robinson (2005) showed that dispositional social evaluative anxiety was uniquely positively associated with boys' and girls' social aggression and negatively associated with boys' overt aggression. Maternal psychological control was positively associated with overt aggression for all boys, but with social aggression only for Latino boys. Although maternal psychological control also was associated with girls' use of overt aggression, this effect was stronger among older than among younger females. The relationship between maternal psychological control and girls' social aggression was mediated by social evaluative anxiety.

According to Simons, Paternite and Shore (2001) controlling for mother/adolescent and father/adolescent attachment and adolescent self-esteem, adolescent higher social cognition was associated with adolescent lower self-report of aggression. Controlling mother/adolescent and father/adolescent attachment and adolescent social cognition, adolescent higher self-esteem was associated with father-reported lower adolescent aggression and father-reported higher adolescent prosocial behavior.
Pakaslahti and Keltikangas-Järvinen (2000) suggested that, firstly, teacher assessments, which, in turn, are in line with each other, and, secondly, that there is a higher concordance in assessing direct than indirect aggression.

2.3.3 Aggression and Suicidal Ideation
Roland (2002) revealed that both bullies and victims had significantly higher mean scores than neutral pupils on both depressive symptoms and suicidal thoughts. Victims had a significantly higher mean score on depressive thoughts than the bullies. On suicidal thoughts, the mean score for bullies was above that of the victims, but this difference was not significant. Girls had significantly higher mean scores than boys on both depressive symptoms and suicidal thoughts. This was the case for all pupils, and for victims, bullies and the neutral pupils.

Speaker and Peterson (2000) found five factors as contributing most significantly to school violence which were (1) a decline in the family structure; (2) a lack of school resources for adults to deal with violence; (3) the breakdown in moral/ethical education of youth; (4) family violence combined with drug-related factors; and (5) violence in the media. The model proposed by the authors integrates and proactively addresses each of these factors through 5 major components: family exclusion, evolution of teacher/administrator roles, student success, conflict mediation, and media intervention.

2.3.4 Age Differences
Thomas (2002) found significant age and gender differences in the propensity to overtly express anger, with younger women (those in their 20s and 30s) having the highest mean scores on Total Expressed Anger.
2.3.5 **Anger Regulation**

Dearing, Hubbard, Ramsden, Parker, et al (2002) found that anger regulation was not directly related to social preference or aggression, it was indirectly related to both social preference and aggression through the mediating mechanism of nonverbal anger expression.

Bushman, Baumeister and Phillips (2001) suggested that many people may engage in aggression to regulate (improve) their own affective states.

2.3.6 **Aggression and Problem Solving**

Keltikangas-Jarvinen (2002) showed that aggressive problem-solving strategies were significantly but not very associated with aggressive behavior among both age groups. The role of social acceptance was of high importance. The aggressive-accepted adolescents underestimated their aggressiveness, i.e., had as low a level of self-rated aggressive strategies as the nonaggressive adolescents. This was particularly true of the late adolescents. The self-rated strategies of the nonaggressive adolescents were not dependent on their level of social acceptance. Finally, gender differences were found. The findings are discussed in terms of the development of sociability and social knowledge about the self.

McMurran, Blair and Egan (2002) showed that higher impulsivity was related to poorer social problem-solving, and poorer social problem-solving was related to greater aggression. Combining impulsivity and social problem-solving indicated that poor social problem-solving, not impulsivity, was what exerted the influence over aggression in this sample. Impulsivity perhaps presents as obstacle to learning in the early developmental years, and the legacy of poor problem-solving is what later contributes to aggression.

Dahlen and Martin (2005) suggested that one's propensity to experience angry feelings or tendency to respond in a socially desirable manner,
anger suppression and the tendency to cope with anger through effective internal controls predicted perceived social support.

Whalen, Jamner, Henker and Delfino (2001) focussed on gender differences in personality-smoking linkages, adolescent negative affectivity, the unique contributions of survey and diary methods, and the promise of targeted preventive interventions such as affect regulation training.

Pakaslathi (2000) noted that a high level of aggressive behavior is traced to deficiencies in processing social information, leading to an increased likelihood of employing aggressive problem-solving strategies. Emotions and physiological factors are also suggested to contribute to the social-cognitive information-processing activities promoting aggression. The development of aggressively biased way of processing social information is seen to be related to numerous biological and environmental factors.

### 2.3.7 Functions of Aggression

Little, Brauner, Jones, Nock, Hawley (2003) highlighted the utility of typological approach to classifying aggressive youth and have implications for both assessment and intervention.

### 2.3.8 Gender differences and Aggression

Salmivalli and Kaukiainen (2004) showed that boys were, on average, both directly and indirectly more aggressive than girls, the cluster analysis revealed a group of highly aggressive adolescents whose use of aggression was predominantly indirect. The members of this cluster group were all girls.

According to Archer (2004) direct, especially physical, aggression was more common in males and females at all ages sampled, was consistent across cultures, and occurred from early childhood on, showing a peak between 20 and 30 years. The overall pattern indicated males’ greater
use of costly methods of aggression rather than a threshold difference in anger.

Evers, Fischer, Mosquera and Manstead (2005) expressed that men and women differed in their anger expressions, despite the fact that they did not differ in anger experience. Women expressed anger to a lesser extent than men, but only in the social condition. Social appraisal partly mediated the relation between sex and anger expression. The role of social appraisal in emotion and appraisal theory is discussed.

Richardson (2005) revealed that males and females reported equally high levels of direct aggression in interaction with romantic partners.

According to Owens, Slee and Shute (2000) girls certainly experience a range of negative psychological effects including anxiety, loss of self-esteem and depression. This pain leads to a desire to escape through leaving the group or the school and even to thoughts of suicide. The pain of indirect aggression may be compounded by irrational self-talk. Some girls react to indirect aggression by retaliating against their aggressors and often conflict is resolved by girls who employ one-to-one strategies that avoid the power of the group. Victims of indirect aggression may be particularly vulnerable if they are new or have few friends or lack assertiveness.

Milligan and Waller (2001) found that internally directed impulsive behaviours were more closely associated with components of anger than externally directed impulsive behaviours. The key elements of anger were anger expression, trait anger and externally directed anger. It is concluded that individuals who engage in internally directed impulsive behaviours are more likely to experience and to express anger relatively frequently, and without specific provocation. Thus, those women who report higher levels of internally directed impulsive behaviours appear to be particularly likely to exhibit anger-proneness as a personality trait.
Moretti, Holland and Mckay (2001) suggested that the evaluation of self-other representations may be valuable in the assessment of risk for gender specific patterns of aggression.

According to Ramirez, Andreu and Fujihara (2001) in both cultures, males reported more physical aggression, verbal aggression, and hostility as well as higher instrumental beliefs, whereas females reported more expressive representation than males. Japanese students reported more physical aggression than their Spanish counterparts, who reported more verbal aggression, hostility, and anger and more expressive representation of aggression.

Richardson and Green (1999) found that males reported approximately equal levels of indirect and direct aggression. Although females reported using more indirect than direct aggression, they did not differ from males in their reports of the frequency of use of indirect aggression. Results suggest the appropriateness of a relatively complex model of gender effects on aggression.

Munroe, Hulefeld, Rodgers, Tomeo, et al.(2000) showed that (1) boys exhibited aggression in approximately 10% of their social behaviors, girls in 6%, and in all 4 cultures the aggression of boys was more frequent than that of girls at a marginally significant level or better; (2) the aggression of boys occurred in the presence of large numbers (and proportions) of same-sex peers; (3) aggression declined with age ; (4) only 5% of children’s aggressive interaction was directed toward adults (individuals aged 17 yrs or older ), whereas 30% of their other, nonaggressive interaction was directed toward adults; (5) the presence of either parent tended to be associated with less aggression; and (6) aggression was displayed more frequently in the 2 patrilineal cultures (Kenya and Nepal ) and less frequently in the other 2 cultures.

Owens, Shute and Slee (2000) provided some clear insights into the nature of teenage girls’ indirect aggression. The predominant indirectly aggressive behaviors include talking about others and excluding peers
from the group. Key explanations for these behaviors concern a desire to create excitement and a range of friendship and group processes centered on girls' needs for close personal relationships and to be a part of the peer group. The girls described the devastating effects of indirect aggression, particularly on girls with certain characteristics that predispose them to victimization. The girls were pessimistic about the potential of interventions.

2.3.9 Emotion and Aggression

Bohnert, Crnic and Lim (2003) was of the opinion that gender moderated the relation between aggressive behaviour and type of emotion identified such that reports of happiness (in response to receiving a disappointing prize) were associated with lower levels of reported aggressive behaviour for boys.

Schultz, Izard and Bear (2004) indicated that multiple emotion processing deficits – including emotion attribution accuracy, anger attribution bias, and self-report of empathy- placed children at risk for heightened levels of teacher-reported aggression. Mediational analyses revealed that an emotion processing risk index fit a model of significant partial mediation between happiness and aggression but not between anger and aggression. The results suggest the multifaceted manner in which children's emotion experiences may influence the development of aggressive tendencies.

Schniering and Rapee (2004) examined the interrelationships between beliefs and noncognitive symptoms and revealed that thoughts on loss or personal failure were the strongest predictors of depressive symptoms, thoughts on social threat were the strongest predictors of anxiety symptoms, and thoughts on hostility or revenge were the strongest predictors of aggression.

Björkqvist and Österman (2000) suggested that social intelligence is required for all types of conflict behavior, prosocial as well as antisocial,
but the presence of empathy act as a mitigator of aggression. When empathy is partialed out, correlation between social intelligence and all types of aggression increase, while correlation between social intelligence and peaceful conflict resolution decrease. Social intelligence is related differently to various forms of aggressive behavior, more strongly to indirect than to verbal aggression, and weakest to physical aggression, which is in accordance with the developmental theory of aggressive style.

2.3.10 Aggression and Psychiatric Patients
Recklitis and Noam (2004) found that aggressive behaviour was found to be negatively associated with ego development, regardless of age, gender or IQ. Defense styles which located the source of conflict outside of the self were associated with higher levels of self-reported aggressive behaviours. Thus aggressive behaviour is tied to the development of critical psychological processes which shape the adolescent's ability to understand themselves and their environment.

2.3.11 Outcome of Aggression
Bond, Bauer and Wingrove (2004) indicated that subjects high in trait aggressiveness are not inhibited by a negative outcome. Smits, De Boeck and Vansteelandt (2004) demonstrated that in the best fitting model, inhibition was conceptualized as a trait. Trait inhibition was negatively correlated with external measures of Anger Out and positively with Control of Anger Out.

Mahon, Yarcheski and Yarcheski (2000) examined in adolescents symptom patterns and diminished general well-being as negative outcomes and vigor and change as positive outcomes of trait and state anger through 2 structural equation models. Results indicate that diminished general well-being and increased symptom patterns were outcomes of trait anger and state anger. Less vigor and less inclination to change were outcomes of trait anger, while state anger had no
appreciable influence on the same variables. Findings suggest that anger particularly trait anger, has a negative influence on the outcome variable studied.

2.3.12 Personality and Aggression
Ang, Ng, Wong, Lee, et al (2004) predicted, that the hypothesized relationship between Big Five traits and aggression were similar across both samples. Aggression had significant negative correlation with the Big Five traits of agreeableness and conscientiousness, and aggression had a significant positive correlation with neuroticism. In line with the hypotheses, the Big Five traits of extroversion and openness to experience were not associated with aggression.

Baumeister, Bushman and Campbell (2000) suggested that the link between self-regard and aggression is best captured by the theory of threatened egotism, which depicts aggression as a means of defending a highly favorable view of self against someone who seeks to undermine or discredit that view.

2.3.13 Indian Studies
A glimpse of the eastern references in the area reveals certain distinctive points.

Sinha, Mathur and Sinha (1990) revealed that rejected children scored higher on extraversion, obstacle – dominance and low on introversion and need – persistence as compared to accepted ones.

Iqbal, Ahmad, Shukla and Akhtar (1993) indicated that individuals from joint families subjects were higher on anger control than nuclear family individuals significantly. Males of nuclear family were higher on anger out than females but in joint families no such difference was observed.

Purohit, and Sudha (1999) showed no significant differences in power orientation probably due to short duration of meditation which is not
sufficient to change the fairly stabilized orientations of these adolescents. With regard to adjustment school and teacher adjustment showed significant improvement showing effect of Vipassana.

Rana and Malhotra (2005) demonstrated that family environment affected aggressive behavior. Gender differences, as expected showed that boys scored higher than girls on physical, verbal and indirect aggression. Results related to the perception levels for various dimensions of family environment, were different in boys and girls.

Sanyal (1991, 2002) found that children belonging to high SES families tended to be significantly more assertive than middle and low class counterparts, due to their higher level of self-confidence, and achievement motivation. For lower SES children, assertiveness works as compensation in order to protect them from self-destructive anxieties.

Indian society tolerates such aggression patterns in early stages of infancy and childhood, accepting them as indicators of immaturity. Although the same is not true for later years of childhood and adolescence, aggressive behavioural patterns are quite common among Indian children. The restrictive parental behaviours towards older children and adolescents ultimately results in aggressive behaviour patterns on their parts (Sanyal and Bhowmick, 1992; Sanyal and Banerjee, 2004; Sanyal et al. 2003).

Kumari (1996) assessed the personalities of those scoring low and high on the Lie scale, and the association of Lie scale scores in the intercorrelation between impulsivity and neuroticism under no motivation to fake good. The group with low scores on the Lie scale had lower scores on impulsivity and higher scores on neuroticism and trait anxiety than the group scoring high on the Lie scale.

Biswas and Mondal (1994-95) studied reactions to frustration and alienation among college students. Female college students experienced
greater alienation. The study revealed that alienation among college students could be predicted on the basis of types and directions of aggression.

Kapoor and Shankhla (1994) studied the relationship between secondary motives and personality dimensions. Findings indicated that a) extraversion was not positively related to the affiliation motive; b) anxiety did not have a significant relationship with achievement and aggressive motives; and c) independence was not positively related to achievement.

Mukherjee and Nayar (1995) revealed a significant difference between the groups in intropunitive release of aggression, irrespective of gender. Aggression was related to intelligence in high achievers, and to achievement in low achievers. In the case of girls, aggression, in general, was found to be negatively related to intelligence and achievement.

**In Sum:** Aggression with its correlates depicts its multivariate structure. It may produce both positive and negative impact on one's personality. Thus the aim of psychological interventions should always be to make aggression adaptive in nature.

**2.4 INTER RELATIONSHIP OF DIFFERENT DIMENSIONS OF PERSONALITY**

**2.4.1 Personality and Coping**

Ferguson (2001) indicated that there are indeed conceptual links between models of personality and coping. It is argued that future research should focus on identifying coping "trait complexes".

Davey, Eaker, and Walters (2003) revealed that there may be different compensatory mechanisms operating for adolescents with different personality profiles.
Schneider (2004) found that neuroticism predicted threat appraisals, and both were related to negative emotional experience and poor task performance. The influence of neuroticism on negative emotions and poor performance was mediated by threat appraisals. High neuroticism confers stress vulnerability, but only when conditions are construed as threatening.

Kardum and Krapić (2001) demonstrated that extraversion has a direct positive effect on problem and emotion-focused coping style while neuroticism and psychoticism have direct positive effects on avoidance coping style. Subjective stress has statistically significant positive effects on all 3 coping styles and the greatest independent effect is on avoidance coping. In general, the results of this research demonstrate that the relationship between personality traits, subjective stress and coping styles in early adolescence are similar to those obtained on the samples of adult subjects.

De Jong, van Sonderen and Emmelkamp (1999) was of the opinion that Experienced stress and neuroticism turned out to be most predictive of psychological distress. The effects of social support, coping and unassertiveness on psychological distress were seriously attenuated by their common association with neuroticism.

Vollrath (2000) predicted that Neuroticism, Extraversion, and Conscientiousness correlated with hassles, whereas Openness to Experience correlated little and Agreeableness not at all. Structural equation models showed that Neuroticism and Conscientiousness predicted 2 of 5 hassle scales prospectively. There was also a prospective effect of daily hassles on later Neuroticism.

Vollrath and Torgersen (2000) was of the opinion that types combining low Neuroticism with high Conscientiousness featured the most favorable profile of stress and coping, whereas types combining high Neuroticism with low Conscientiousness showed high vulnerability to stress and poor coping. The effects of Extraversion were more
ambiguous and appeared to depend on the specific combinations of Neuroticism and Conscientiousness. The findings suggest that this typology represents a useful approach to addressing the question of how individuals with different combinations of personality traits manage stress.

2.4.2 Personality and Emotion Regulation
Kokkonen and Pulkkinen (2001) was of the opinion that prior Neuroticism led to higher emotional ambivalence and lowered use of Repair at age 36. Prior Extraversion, on the other hand, was linked to lower emotional ambivalence at age 36. Extraversion also led to higher attempts to rely on emotional social support to regulate emotions, but less interest in using Repair. Correlational findings revealed that Extraversion and Neuroticism showed differential continuity between ages 27 and 33.

Gomez, Gomez and Cooper (2002) showed that extraversion was associated positively with the processing of pleasant information, while neuroticism was associated positively with the processing of unpleasant information.

Tamir and Robinson (2004) depicted that individuals high in neuroticism were faster to make evaluations when in a negative mood state like sadness. By contrast, individuals low in neuroticism were faster to make evaluations when in a neutral mood state. Thus although negative mood states are hedonically unpleasant, they can be beneficial in some ways for individuals high in neuroticism.

2.4.3 Personality and self esteem
Robins, Tracy, Trzesniewski, Potter et al (2001) revealed that high self-esteem individuals were emotionally stable, extraverted, and conscientious and were somewhat agreeable and open to experience. High self-esteem individuals tended to ascribe socially desirable traits
to themselves, and this tendency partially mediated relations between
the Big Five and self-esteem.

Watson, Suls and Haig (2002) demonstrated that self-esteem was
strongly negatively correlated with Neuroticism/Negative Affectivity
and moderately to strongly related to Extraversion/Positive Affectivity.
Taken together, the data suggest that global self-esteem measures
define one and of a bipolar continuum, with trait indicators of
depression defining the other.

Judge, Erez, Bono and Thoresen (2002) suggested that measures
purporting to assess self-esteem, locus of control, neuroticism, and
generalized self-efficacy may be markers of the same higher order
concept.

Ficková (1999) indicated that low self-esteem correlated significantly
with high neuroticism, high state and high trait anxiety. A comparison
of the relationships between agreeableness and openness personality
dimensions and self-esteem indicators in girls and boys indicated
significant variability and intersexual differences. Results indicate that
neuroticism, extroversion, conscientiousness, state and trait anxiety
are reliable predictors of self-esteem.

2.4.4 Personality and well being

Bostic and Ptacek (2001) found that students in conscientiousness and
high in external locus of control experienced more variability in SWB
over the study period.

Jackson and Finney (2002) revealed that younger students were more
likely than older students to be angry/hostile (rather than consistently
depressed or anxious) about negative life events. The authors believe
that younger adults either lack the psychological resources of maturity
and experience or adopt ineffective coping strategies when faced with stressful situations.

Aatlo-Setälä, Poikolainen, Tuulio-Henriksson, Marttunen, et al. (2002) was of the opinion that females were more likely to be distressed than males. High trait anxiety and somatic symptom scores among adolescent females, and high immature defense style scores among males predicted mental distress. Males with low trait anxiety in adolescence had less distress. The results indicate that anxiety as an important predictor of mental distress. Gender differences in other predictors suggest gender differences in coping.

Schimmack, Oishi, Furr and Funder (2004) found that depression and positive emotions/cheerfulness are necessary and sufficient to predict life satisfaction from personality traits. The results also lead to a more refined understanding of the specific personality traits that influence life satisfaction. Depression is more important than anxiety or anger and a cheerful temperament is more important than being active or sociable.

Spangler and Palrecha (2004) found that extraversion and neuroticism, hedonic factors, were strongly related to happiness, but personal strivings, eudaimonic factors, were unrelated, thus providing support for the hedonic view. Future research should study hedonic and eudaimonic well-being simultaneously.

Scollon (2005) was of the opinion that changes in life satisfaction and a sense of meaning and purpose in life paralleled changes in personality.

Rantanen, Pulkkinen and Kinunen (2005) demonstrated that Neuroticism was positively linked to work-to-family conflict (WFC), family-to work (FWC) conflict, and psychological distress in both genders. Neuroticism was also a moderator strengthening the link between WFC and psychological distress in women. Openness to
Experience was positively linked to FWC in men, and Agreeableness was negatively linked to psychological distress in both genders.

Wilkinson and Walford (2001) found that quality or attachment to parents, but not peers, predicted increased well-being and decreased distress independent of neuroticism, extraversion, and life event variables.

2.4.5 Personality and change
Helson, Kwan, John and Jones (2002) revealed that people score higher age on characteristics such as conscientiousness, agreeableness, and norm-adherence, and they score lower with age on social vitality. These findings provide evidence that personality does change during adulthood and that these changes are non-negligible in size, systematic, not necessarily linear, and theoretically important.

Goodwin, Fergusson and Horwood (2003) found that Young people in the highest quartile of neuroticism at age 14 had rates of psychotic symptoms that were two to three times higher than those in the lowest quartile. Young people with high levels of neuroticism had rates of psychotic symptoms that were between 1-5 to 1-8 times higher than those with low levels of neuroticism. Early neuroticism may be a precursor to the onset of psychotic symptoms.

Canals, Vigil-Colet, Chico and Martí-Henneberg (2005) indicated that personality was not stable in the age range analyzed and that these changes were independent of pubertal stages. Moreover, gender had significant effects on psychoticism and antisocial behaviour, and an interactive effect with age on neuroticism, which may be related to the increase in certain pathologies.

Hřebíčková, Čermák and Osecká (2000) revealed a relation between gender and self-report in the 5 examined dimensions of neuroticism, extraversion, openness, agreeableness, and conscientiousness. Females tended to score higher than males in all 5 personality
dimensions. Younger Subjects scored higher on the neuroticism, extraversion, and openness scales, whereas older subjects scored higher on the agreeableness and conscientiousness scales. Differences between the age groups suggest that personality dimensions change during development.

Loehlin and Martin (2001) found that for both males and females the trends for psychoticism, extraversion and neuroticism were generally downward with age, and for lie, upward. Heritabilities were reasonably stable across age for psychoticism, extraversion, and neuroticism, and the effects of shared environments negligible, but lie showed some influence of shared environment as well as genes in all but the oldest age group.

Malatesta-Magai (1999) reported personality change was associated with positive and negative interpersonal life events of an intimate nature such as marriage, divorce, and death of loved ones that took place over the past 8 yrs, and was not associated with other high and low points in lives involving careers, changes in residence, and distant social relationships.

2.4.6 Personality and Depression

Harkness, Bagby, Joffe and Levitt (2002) revealed significant decreases in Neuroticism scores, and significant increases in Extraversion and Conscientiousness scores, from time 1 to time 2 for both patient groups. Patients with major depression + chronic minor depression scored significantly higher on the Angry Hostility facet of Neuroticism and significantly lower on Agreeableness than those with major depression alone.
Clara, Cox and Enns (2003) found that self-criticism accounted for a statistically significant additional amount of in measures of depression beyond that accounted for by Neuroticism as a clinical sample.

Oldehinkel, Bouhuys, Brilman and Ormel (2001) suggested that the increase risk for depression associated with disability was larger for patients with higher levels of neuroticism. Jorm, Christensen, Henderson, Jacomb, et al (2000) found that neuroticism predicted anxiety and depression, but there were no Neuroticism x Extraversion interaction effects.

2.4.7 Personality and Risk taking

Knust and Stewart (2002) supported the distinction between socialized and unsocialized sensation seeking and suggest that these factors represent more overarching personality factors. Psychoticism was a clear marker of the more broad impulsive, unsocialized sensation seeking factor, rather than representing a supertrait in its own right. This factor was also represented by lie, disinhibition, and boredom susceptibility scales.

Zuckerman and Kuhlman (2000) was of the opinion that generalized risk-taking (across all 6 areas) was related to scales for impulsive sensation seeking, aggression, and sociability, but not to scales for neuroticism or activity. Gender differences on risk-taking were mediated by differences on impulsive sensation seeking.

Gullone and Moore (2000) revealed that younger adolescents and girls generally reported engaging in risk behaviors less frequently than the older adolescents and boys. Female adolescents scored higher on neuroticism, agreeableness and conscientiousness than male adolescents. Risk judgment, personality factors, age and sex were found to be significant predictors of risk behaviors, depending on the risk type. These factors were most successful in predicting rebellious risk-taking and least successful in predicting thrill-seeking.
2.4.8 Personality and Academic Performance

Reed, Bruch and Haase (2004) demonstrated that one source of covariation involved association between conscientiousness / extraversion / low neuroticism and career search self-efficacy / career information seeking. A second source involved association between openness and a lack of career information seeking. The third source involved association between neuroticism / openness and self-exploration.

Boone, van Olffen, and Roijakkers (2004) found strong support for the hypotheses that (1) personality predicted specific study choices and (2) personality predicted different levels of rationality in the choice process. In addition, the findings also suggest that tighter matches between personality and study programs could be observed for students making rational choices.

Rubinstein (2005) found that Neuroticism is negatively related to both Conscientiousness and to Agreeableness, which is positively related to both Openness and Conscientiousness; the latter are negatively related to one another. Women are significantly less agreeable and open to experience than students of all other faculties, and more neurotic than natural science students. Female students of the natural sciences are significantly more agreeable than both their male counterparts in the natural sciences than law students. The results are discussed in light of the specific characteristics of the different fields of study and in context of traditional gender role expectations from men and women.

Paunonen and Ashton (2001) compared two broad Big Five factor measures with two narrow personality trait measures in the prediction of final grades in an undergraduate psychology course. In each comparison, the lower level trait measure did better than its higher level factor measures in the prediction of course grades. It is concluded that the aggregation of narrow trait measures into broad factor
measures can be counter-productive from the points of view of both behavior prediction and behavior explanation.

Paulhus, Trapnell and Chen (1999) found that, first-borns were nominated as most achieving and most conscientious. Later-borns were nominated as most rebellious, liberal, and agreeable.

McKenzie, Taghavi-Khonsary and Tindell (2000) showed negligible or negative correlation between neuroticism and academic achievement for the low superego group of students. For the high superego group, the correlations were positive for final degree classification. From the low to the high superego groups, there was an increase in the positive correlation between neuroticism and achievement from the 1st to the 3rd year of the course. It is suggested that the Furneaux factor, as well as clarifying the relationship between neuroticism and academic achievement, provides an estimate of a course's perceived difficulty and thus, perhaps, its rigour.

Schroth and McCormack (2000) indicated that for study-abroad students, though not seeking thrills found in dangerous activities, parties, and so on, were instead seeking new experience the mind and senses, and that their elevated competitiveness scores were due to the selectiveness of the International Program itself.

2.4.9 Personality and Mood
Harris and Lucia (2003) revealed significant correlations between the personality factors and mood dimensions suggesting that personality is related to some aspects of mood.

2.4.10 Personality and Religion
Fearn, Lewis and Francis (2003) found that scores on Psychoticism ($r = -.25$), but neither those on Extraversion nor Neuroticism, were significantly associated with rated religiosity.
Tlx and Frazier (2005) found that the negative relationship between intrinsic religiousness and hostility was mediated by the degree of sanctification within individuals' strivings. The relationships between intrinsic religiousness and both anxiety and depression were moderated by religious tradition, with Catholics' intrinsic religiousness significantly associated with greater anxiety and depression but Protestants' intrinsic religiousness not significantly associated with either of these mental health variables.

McCullough, Tsang and Brion (2003) examined the association of the big five personality factors with religiousness in adulthood. Among the big five conscientiousness in adolescence was uniquely related to higher religiousness in early adulthood. For adolescents with high emotional stability, the link between strength on religious upbringing and religiousness in adulthood was weaker than it was for adolescents who were less emotionally stable. These findings replicate the work of others demonstrating the importance of conscientious as a predictor of religiousness.

2.4.11 Personality, Suicidal Ideation and Attempt

Beever and Miller (2004) indicated that higher perfectionism in an inpatient was directly associated with higher suicidal ideation 6 months later. Cognitive bias, in contrast, led to greater hopelessness 6 months later, which in turn led to higher concurrent suicidal ideation. Perfectionism and negative cognitive bias both uniquely contributed to the prospective prediction of suicidal ideation.

Haliburn (2000) found the most urgent reasons for self-harm were to die, to escape from an intolerable situation and to obtain relief. More than 80% suffered from major depression. On measure for obsessive-compulsive disorder, interference scores and scores on general obsessiveness were significant, particularly for those who seriously wanted to die. Other characteristics included being perfectionistic and overly conscientious, and experiencing enormous and inappropriate
guilt. The author's findings suggest the importance of assessing depression, anxiety, and obsessive-compulsive personality traits in suicidal adolescents if treatment is to be comprehensive.

Duberstein, Conwell, Seidlitz, Denning et al. (2000) hypothesized that low Extraversion would be associated with a lifetime history of attempted suicide, and high Neuroticism would be associated with suicidal ideation. A relationship between Openness to Experience and suicide ideation was also observed. These findings suggest that longstanding patterns of behaving, thinking, and feeling contribute to suicidal behavior and thoughts in older adults and highlight the need to consider personality traits in targeting prevention strategies.

Fritsch, Donaldson, Spirito and Plummer (2000) suggested that clinicians should focus most on the personality characteristics of sensitivity and on affect regulation when assessing Adolescent Suicide Attempts. In addition, hopelessness is important to systematically assess because it appears to be related to a variety of dysfunctional personality characteristics that may affect follow-up outcome.

According to Velting, Rathus and Miller (2000), adolescent attempters experienced more severe overall levels of personality dysfunction. At the trait level, attempters obtained higher scores on the forceful and borderline tendency scales and lower scores on the submissive and conforming scales, reflecting negative mood regulation deficits (e.g., anger control problems) and persistently high levels of aggressive impulsivity.

2.4.12 Personality and Worry
Laugesen, Dugas and Bukowski (2003) indicated that intolerance of uncertainty, positive beliefs about worry, and negative problem orientation each account for a significant amount of variance in adolescent worry scores. Analyses demonstrate that intolerance of uncertainty has the strongest association with worry scores and is the
most important variable in discriminating between moderate and high adolescent worriers. These results suggest that intolerance of uncertainty plays a key role in our understanding of adolescent worry.

2.4.13 Personality and Sex Difference

2.4.14 Relationship of Two Personality Scales
Shatz (2004) indicated that the Aggressive and Detached scales loaded onto the same factor as Psychoticism, while the Compliant scale and Neuroticism loaded onto the same factor.

Buckingham, Charles and Beh (2001) found a negative correlation between E and N for both male (-0.35) and female (-0.22) respondents. In line with S.B.G. Eysenck’s notion of partial independence a significantly higher proportion of neurotic male and female respondents were classified as introverted as opposed to extraverted. However, amongst respondents low on neuroticism a significantly higher proportion of females were classified as extraverted rather than introverted.

2.4.15 Indian Studies
In the Indian context, Kureshi and Hussain (1979) studied the interrelationship between neuroticism, anxiety and self-concept. All the three variables were found to have significant and positive relationship. Girls were more anxious than boys.

Krishna and Kumar (1979) studied 58 emotionally disturbed and 67 emotionally adjusted adolescent males. The emotionally disturbed subjects were those who were brought to clinic. They were found to be more neurotic, anxious, insecure, poorly adjusted in home, health, social and emotional areas than the subjects of the other group.
According to Rana and Shirali (1977) university students showed more degree of frustration than financial and health aspects and the frustration was inwards.

Rani and Venkatramalah (1978) also showed that extraverts tend to use more often styles of evaders, agonizer and plunger while the introverts use the styles of evader and plunger.

Tripathi (1979) showed that self disclosures indicated high percentage of being reserve, sober, shy, tough minded. In other words they are more stable in terms of personality.

According to Srivastava, Seth and Shobha (1980) the socio-culturally deprived subjects were more neurotic ( p < .01 ).

Barnes and Pai (1981) indicated no relation between childhood adjustment and present level of anxiety. The medical students revealed introversion bend in their personality type.

Singh and Basu (1982) showed that anxiety was within normal range with a trend towards higher side ( mean = 6.28 ). The problem areas were mainly the social and personal relationships, recreational and social activities which were adversely affected due to academic pressure and adjustment to college work. The results also showed a positive relation between some of the anxiety components and problem areas like health and physical development, social and recreational activities, personal and psychological relations, home and family, morals and religion, adjustment to college work and no relation to finances, living conditions, vocational and educational future and curriculum and teaching procedure.

Dubey, Uppal, and Verma (1982) indicated no significant differences in need priority in relation to personality dimensions of psychoticism, neuroticism, extraversion, and lie (social desirability).
Nathawat and Rastogi (1983) revealed that emotionally secure group took less time in solving problem on EFT and were significantly more field independent as compared to insecure who were field dependent. Gender differences had insignificant effect on cognitive style and security / insecurity feelings.

Mahanta (1983) indicated significantly positive relationship between jealousy and psychoticism (0.60) and neuroticism (0.71).

Dubey (1983) revealed that reactions to frustration were more correlated to personality factors in young adults of schedule caste than adolescent of schedule caste. It may be concluded that SC adolescents are less sensitive as compared to SC young adults and non-SC groups personality factors wise.

Broota, Kaur and Priyadarshini (1985) depicted that performance on cancellation task was significantly influenced by verbal blame than verbal praise in both the genders and more so in introverts. Blame significantly improved performance in girls while in boys praise was more effective in improving performance.

Abraham and Verghese (1986) suggested high and positive correlations between neuroticism scores of EPI and home, health, social and emotional adjustment while E score of EPI correlates highly with social adjustment only.

According to Aurora, Chauhan, Mathur and Chauhan (1986) the personality of deviants was a good correlate of psychic retardation exhibiting immature, non-disciplined type of emotionality, anaemically functioning ego-supergo-self sediment and intelligence along with laxity, self-indulgence and aggression in higher degree than non-deviant adolescents.

Murgai and Sathyavathi (1988) indicated that depressives were more externally controlled, had lower self-esteem and were more alienated
than normals. Distorted patterns of thinking were reflected in self-rated inferiority, hopelessness, helplessness and detachment which correlated with personality measures of locus of control, self-esteem and alienation in neurotics.

Biswas and Rai (1991) showed that the tribals were higher on N and low on L scale in comparison to non-tribals. In comparison to British sample both the groups of Indian sample scored low on E while on N only Mizos girls (tribal) showed more neuroticism.

Lal, Gupta and Trivedi (1992) showed significant change in attitudes after the posting towards psychiatry. On personality dimension higher the E and N scores higher in change in attitude.

According to Venkatesh, Pal, Negi, Varma, Sapru and Verma (1994) yoga practitioners (one year) showed lesser anxiety, neuroticism, and lesser stressful life events. Type A behavior was unaffected by yoga as they remained moderately high. The attitude towards yoga was more positive in practitioners.

Dharitri (1996) indicated that 20.96% students scored below average indicating their susceptibility to manifest emotional disturbance and majority of these neglected recreational activities.

Sahoo, Sahoo and Harichandan (2005) found that males indicated greater extroversion than did females. However females indicated greater openness than did males. Less happy individual revealed neuroticism compared with happy persons. Happy persons indicated greater extroversion, openness and conscientiousness than did less happy participants.

**In Sum:** Personality, with its associated dimensions highlights its significance in research. The personality profile with its different components may be contributory to a balanced life style of an individual.
2.5 ACHIEVEMENT MOTIVATION AND OTHER DIMENSIONS

2.5.1 Goals and Performance
Jagacinski, Madden and Reider (2001) suggested that perceived ability was more strongly related to performance when students were given ego-involving rather than task-involving instructions. In addition, task orientation was more strongly related to performance when task-involving rather than ego-involving instructions were given. The results demonstrate that dispositional and situational factors may interact to predict performance.

Nurmi, Salmela-Aro and Koivisto (2002) showed that the more the subjects emphasized the importance of work-related goals, and the more they thought they had progressed in the achievement of such goals, the more likely they were to find a job commensurate with their education and the less likely they were to be unemployed after graduation. Subjects who had found work that was commensurate with their education appraised their work-related goals later on as increasingly achievable and as arousing positive emotions, whereas those who had become unemployed showed a reverse pattern.

Morris, Brooks and May (2003) showed that nontraditional college students more often endorsed learning goals and utilized task-oriented coping, in addition to exhibiting a wider repertoire of coping behaviors than did the younger traditional college students.

According to Haracklewicz, Barron, Tauer, Carter, et al.(2000) mastery goals positively predicted subsequent interest in the course. Performance goals positively predicted grades. Three semesters later, mastery goals predicted subsequent enrollment in psychology courses, whereas performance goals predicted long-term academic performance. These positive and complementary effects of mastery and performance goals on different measures of academic success are consistent with a
multiple-goals perspective in which both goals can have beneficial consequences in college education.

2.5.2 Adolescent's Decision Making
According to Miller and Byrnes (2001) adolescents' valuing of academic goals and their decision-making competency were typically the best predictors of their achievement behaviour.

McMahon and Watson (2005) revealed that the nature of information the children needed to find out was related to life/career implications and life/career management tasks and to a lesser extent to interests and personal characteristics and the nature of work.

Osoro, Amundson and Borgen (2000) indicated that rural students tended to seek help from parents and teachers more than urban students, and that parents, more than career teachers, played a major role in the career decision-making of students. Findings also indicate that gender, self-concept, and vocational stereotyping were among the major factors that influenced career decisions of high school students in Kenya.

2.5.3 Factors of Academic Achievement
According to Marchant, Paulson and Rothlisberg (2001) students' perceptions of parenting style, parental involvement, teaching style, and school atmosphere significantly predicted their school achievement, however, students' motivations and self-competence mediated the relation between students' contexts and their academic achievement. Furthermore, parental values, teacher responsiveness, school responsiveness, and supportive social environment predicted students' motivations and academic competence above and beyond parenting style, parental involvement, and teacher control.
Carney-Crompton and Tan (2002) suggested that traditional students exhibited poorer psychological functioning when they were less satisfied with their emotional support network. In contrast, psychological functioning within the nontraditional students was independent of the amount and satisfaction with their emotional and instrumental social support resources. Despite having fewer sources of support, nontraditional students reported better academic performance than did the traditional students.

Buchmann and Dalton (2002) indicated that peers and parents influence educational aspirations in countries with relatively undifferentiated secondary schooling, like the United States, while the influence of significant other is negligible in societies with more differentiated secondary education. In these latter systems, it appears that aspirations are largely determined by the type of school the student attends. The effects of significant others on students' aspirations depend, in large part, on the structural features of the educational systems in which they operate.

Wong, Wiest and Cusick (2002) indicated that autonomy support, parent attachment, scholastic competence, and self-worth predicted the academic criterion variables.

Trusty (2002) indicated that the effects of early academic performance variables were strongest followed by effects of family variables and high school behavior variables.

Fass and Tubman (2002) revealed that indices of cognitive ability were significant predictors of college students' grade point averages, while broader measures of functioning in early adulthood (attachment, intellectual ability, self-esteem) were significant predictors of scholastic competence. Perceived attachment in both parents and peers is a component of wider patterns of social competence and adjustment that may function as protective or compensatory factors during key
transitions in young adulthood, such as participation in college and with its attendant demands for academic achievement.

Hargrove, Creagh and Burgess (2002) suggested that family of origin interaction patterns may play small, yet significant roles in the formulation of clear and stable career goals and the promotion of self-confidence in regard to completing career planning activities.

According to Shearin (2002) adolescent males who perceived parent-adolescent interactions as positive and were identified as having a stable psychological well-being, were more likely to have average to above-average grade point averages, and high achievement group membership.

Taylor and Lopez (2005) revealed that family routine was positively associated with school achievement and adolescents’ school attendance, attention to school work, and sense of challenge, and was negatively related to problem behavior in school. Students’ attendance and attention were also positively associated with school achievement and negatively associated with problem behavior, and mediated the relation of family routine with school achievement and problem behavior. Adolescent perceptions of parental expectations were positively related to students’ school achievement.

Marjoribanks (2005) indicated that, while family background and academic achievement measures had medium associations with attainment, adolescents’ educational aspirations made a large independent contribution to explaining differences in young adults’ education attainment.

Wang and Staver (2001) depicted positive links were found between student career aspiration and several variables of science education, including educational outcomes, instructional quantity, and home environment.
According to Athanasóu (2001) there was sufficient evidence to argue that the educational and occupational achievements were related to gender, socio-economic status, ethnicity, geographical location (rurality), completion of the highest level of secondary schooling, vocational interests in high school and even levels of literacy and numeracy in primary school.

Chirkov and Ryan (2001) supported the hypotheses that Russian adolescents would perceive parents and teachers as more controlling than U.S. students; and in both samples, perceived autonomy-support would predict greater academic self-motivation and well-being.

Barrett Singer and Weinstein (2000) confirmed the hypotheses that the more differentially favorable the treatment or the less differential treatment reported in the home, the more positive late adolescents outcomes are.

2.5.4 Underachievement
Lau and Chan (2001) supported that motivational variables were important factors in discriminating under-achievers and high achievers. While under-achievers had poor academic self-concept, low attainment value in learning, and deficiencies in using effective learning strategies, they did not demonstrate maladaptive attributional pattern as described in Western studies.

2.5.5 Career Choice and Conception of Work
Schoon and Parsons (2002) suggested that teenage aspirations in combination with educational attainments are a major driving force in the occupational development of young people and that they mediate the effects of socioeconomic background factors.

Nauta and Epperson (2003) revealed that college Science, Math and Engineering (SME) outcome expectations were associated with plans to become a leader in an SME field.

DeMarie and Aloise-Young (2003) evidenced that students had interest in their own major and that they were interested in learning their own majors' vocabulary. Students in both areas rated interest as one of the top three reasons they selected their major.

Chaves, Diemer, Blustein, Gallagher, et al.(2004) suggested that urban youths' perceptions of work suggested that work does not generally represent a means of self-concept expression or the expression of one's interest in the world of work. Specifically, urban youth tended to define work in terms of external outcomes (e.g., money ), which was also a common theme among the messages they received about work from their families.

Tak (2004) showed that there was an overall significant difference between male and female students.

Tracey, Robbins and Hofsess (2005) indicated that the pattern of interests was fairly stable in grades 8-12 for males and females. Interests were also found to become more crystallized over time; however interest – career choice congruence evidenced an inverted V pattern. With further examination, student interests became less people based and their career choices more people based in grade 12. The results support the importance of grade 12 as a time of focus for research and intervention, and for continuing investigation of gender differences in adolescent career and academic development.
Turner and Lapan (2005) revealed that boys showed significant increases in artistic, social, and conventional interests, and girls showed significant increases in realistic, enterprising, and conventional interests. Results suggest that young adolescents' career-related self-efficacy and interests in non-traditional careers can be increased through their participation in computer assisted career intervention and group exploration activities.

Low, Yoon, Roberts and Rounds (2005) examined the stability of vocational interests from early adolescence (age 12) to middle adulthood (age 40). Furthermore, interests reflecting hands-on physical activities and self-expressive/artistic activities were more stable than scientific, social, enterprising, and clerical interests. Vocational interests showed substantial continuity over time, as evidenced by their higher longitudinal stability when compared with rank-order stability or personality traits. The findings are discussed in the context of psychosocial development.

Aglobu-Kemmer (2000) demonstrated that majority of the students indicated a very strong interest in people-orientedness (89%) and persuasive skills (75%). In contrast, 42% of the students demonstrated strong interest in science (42%), and mechanical activities (47%), and only 24% indicated a strong interest in outdoor activities field work.

Khallad (2000) was of the opinion that aspirations can serve as indicators of later education attainment. Overall, the male and female participants perceived equal levels of family support for their education and career plans and aspired to equally high goals. Socioeconomic status was positively related to the level of participants' education aspirations but not to the level of their career aspirations. Lackland and De Lisi (2000) revealed that humanitarian concerns, femininity scores, masculinity scores, and utility values were significant predictors of college major.
Schoon (2001) showed that teenage job aspirations predict specific occupational attainments in adulthood. Job aspirations expressed in adolescence differed between the sexes, and were related to parental education, teacher-ratings and self-ratings of ability, test scores in mathematics, and the school environment. Occupational attainment at age 33 was significantly related to the job aspirations expressed at age 16, but also to the belief in one's own ability, mathematical test performance, specific personality characteristics, as well as social background and gender. It is concluded that for the understanding of occupational development across the lifespan both individual and contextual factors have to be considered.

Meinster and Rose (2001) showed that students with relatively higher educational aspirations expressed more investment in work roles than family roles, but students with relatively lower educational aspirations expressed equivalent investment in work and family roles.

Davey (2001) revealed that interests were the highest priority of male students, whereas altruistic values were more important to female students. Contrary to expectation, working conditions were not a factor. Implications for career counseling are discussed.

Wang and Ma (2001) showed that educational outcome and motivation exerted the strongest direct effect on student career aspiration. Although with similar magnitude the effects of educational outcome were positive on student career aspiration, whereas the effects of motivation were negative.

According to Lau, Nicholls, Thorkildsen and Patashnick (2000) American students are more firm in the view that school should teach them to understand science, think critically, be useful to society and consider the family first. In contrast, Chinese students showed greater preference that school should teach them to face challenges, creativity, sacrifice, and respect authority, and to prepare them to earn money for respect, and luxuries, and to enter high status colleges and jobs.
Trusty and Ng (2000) showed that there was 3-way interaction of gender, SES, and achievement perceptions in predicting choice of Holland type of postsecondary major.

2.5.6 Behaviours and Academic Achievement
Malecki and Elliot (2002) indicated that (1) social skills are positively predictive of concurrent academic achievement and (2) problem behaviours are negatively predictive of concurrent academic achievement. Only social skills were a significant predictor of future academic functioning. The linkage between problem behaviours and future academic performance may vary as a function of ethnic or cultural membership status.

Lam, Yim, Law, Cheung (2004) found that Competitiveness induces performance goals.

Miejer and van den Wittenboer (2004) depicted the relationship of chronic sleep reduction, eagerness, achievement motivation, and intelligence with school performance. Less chronic sleep reduction, greater eagerness, higher achievement motivation and intelligence give rise to a better school performance.

Greene, Miller, Crowson, Duke et al. (2004) strongly supported the model demonstrating that student perceptions of class-room structures are important for their motivation. Also supported was the importance of perceiving the current class work as being instrumental for future success.

Andersson and Strander (2004) revealed that a substantial number of the respondents remembered school in the same way as they perceived school when in school. Those who hated school seemed to be more vulnerable when they were adult. The school should be a 'learning centre' the aim of which is to reach the joy of learning and stimulate the students thirst for knowledge.
Amenkhienan and Kogan (2004) identified the academic activities and support services perceived by engineering students as having a positive impact on their academic performance. The results suggest three primary factors: (a) individual effort and involvement, (b) peer interaction, and (c) faculty contact. Differences in usage and perceptions of these activities and support services based on gender, ethnicity and GPA were assessed.

Bruinsma (2004) indicated that student's expectancy and values positively affected the total number of credits. However, the expected relationship through the deep information processing approach was not found. Even though the analysis showed a relationship between students' expectancy, values and the deep information processing approach, this approach did not affect academic achievement.

Backels and Wheeler (2001) found that the majority of faculty members perceived mental health issues as having an impact on academic functioning. 14 of the presenting problems were rated as having a significant effect by more than 50% of the subjects. However, they were not as likely to consider extending flexibility for all of the high-rated problems.

Lee and Ying (2001) showed that 42.5% of subjects reported a positive attitude toward academic achievement, 13.1% expressed negative attitude, and 44.4% expressed a mixed positive and negative attitude. In contrast, 83% of subjects exhibited embracing behavior toward academic achievement, while only 1.3% exemplified rejecting behavior, and 15.7% showed mixed embracing and rejecting behavior. Attitude and behavior were significantly correlated. All subjects with positive attitudes exhibited embracing behavior. Those subjects with non-positive attitudes were more likely to show embracing behavior than non-embracing behavior. Findings suggest that Asian-American adolescents feel significant distress, although they are embracing academic achievement.
Abu-Hilal (2000) revealed that 'attitudes to school' influence achievement, but only indirectly. Level of aspiration had significant direct effect on achievement and mediated between 'attitudes' and achievement.

2.5.7 Different Dimensions of Education and Personality
Rottinghaus, Lindley, Green and Borgen (2002) depicted that the domains of personality, self-efficacy, and interests each made independent contributions to explaining the level of educational aspirations. As predicted, students aspiring a higher levels of education were characterized by higher Openness, Consciousness, Investigative Confidence, Investigative Interests, Artistic Interests, and scores on the Learning Environment personal style scale. Three results were not predicted for higher educational aspirations: higher Social Confidence, lower Neuroticism, and lower Enterprising Interests.

Crocker, Sommers and Luhtanen (2002) showed that participants who were higher in basing their self-esteem on academic competence showed greater increases in self-esteem on acceptance days and greater decreases in self-esteem on rejection days than participants low in this contingency of self-worth. Daily affect was significantly related to daily self-esteem, but this association was stronger for students who based their self-esteem on academic competence, suggesting that affect and self-esteem are more strongly related when events are relevant to one's contingencies of self-worth.

Lindley and Borgen (2002) revealed a particularly strong relation between generalized self-efficacy and Investigative and Enterprising confidence for both women and men; in addition, for men, generalized self-efficacy was strongly related to Conventional confidence as well. However, GPA showed no substantial relations with either form of self-efficacy.
Hojat, GonneUa, Erdmann and Vogel (2003) tested three hypotheses that medical students who can cope better with adversity would (1) have a more positive personality profile, (2) report less physical illness, (3) perform better academically.

Flowers, Milner and Moore (2003) suggest that African American high school seniors who reported higher levels of locus of control were more likely to have higher educational aspirations than African American high school seniors who reported lower levels of locus of control.

Parker, Summerfeldt, Hogan and Majeski (2004) reported that academic success was strongly associated with several dimensions of emotional intelligence. Results are discussed in the context of the importance of emotional and social competency during the transition from high school in university.

Robbins, Lauver, Le, Davis et al. (2004) reported that the best predictors for GPA were academic self-efficacy and achievement motivation.


According to Seifert (2004) emotions and beliefs are thought to elicit different patterns of behaviour such as pursuit of mastery, failure avoidance, learned helplessness and passive aggression. Implications emerged which focused upon creating classroom contexts that foster feelings of autonomy, competence and meaning as the catalysts for developing adaptive, constructive learning.
Gasser, Larson and Borgen (2004) showed that specific dimensions of personality and interests are related to college students’ plans for future scholarly work. Similarly, the current study found that components of one’s personality and interest may relate to aspiring higher levels of education.

Walls and Little (2005) tested the hypothesis that agency beliefs mediate relations between styles of motivational self-regulation (i.e., intrinsic, identified, introjected, and extrinsic) and school adjustment (school grades, school well-being, and positive and negative affect). A structural equation model testing this hypothesis indicated that agency beliefs about one’s effort mediate the relations between the styles and positive school adjustment. By contrast, the extrinsic style was not mediated by agency beliefs but reflected adverse low-magnitude direct effects on all of the outcomes except positive affect. Overall, the model strongly predicted school adjustment, and adherence to the identified motivational style was particularly important.

Miquelon, Vallerand, Grouzet and Cardinal (2005) posited that self-oriented perfectionism facilitates self-determined academic motivation, whereas socially prescribed perfectionism enhances non-self-determined academic motivations. In turn, self-determined and non-self-determined academic motivations, respectively, lead to lower and higher levels of psychological adjustment difficulties.

According to Yeung and McInerney (2005) task and effort orientations were found to be stronger than the other orientations and to have relatively stronger associations with education aspirations, whereas task and praise had stronger associations with career aspirations. The apparent drop in motivation scores from Grade 7, especially in task and effort orientations, both pertaining to a mastery orientation dimension that has been assumed to be a major driving force for excellence, calls for urgent attention to student motivation in junior high school classes.
De La Torre (2005) revealed a statistically significant and inverse relationship between academic functioning and perceptions of status worth risk. Higher academic functioning Latino youth perceived the system, their future prospects and the rewards of effort in a more trusting and optimistic manner than did low academic (non-resilient) Latino youth who no longer trusted the system in which they had encountered negative experiences.

Gavala and Flett’s (2005) major findings were that: (a) individuals reporting high stress, more feelings of discomfort at university, and a lower sense of academic control, were significantly more likely to be experiencing a lowered sense of well-being, and reduced feelings of academic enjoyment and motivation; (b) under conditions where there is a high sense of academic control, those with a high sense of comfort with university report significantly higher well-being that those with low comfort; (c) there were no moderating effects of cultural identity. Providing a comfortable academic environment that students’ perceive as culturally-congruent increases perceived psychological well-being and academic enjoyment and motivation.

Busato, Prins, Elshout and Hamaker (2000) indicated that intellectual ability and achievement motivation were associated positively with academic success. For the meaning directed, reproduction directed, and application directed learning style, no positive association with academic success could be detected. The undirected learning style however, appeared to be a consistent negative predictor. For the Big Five personality factors (extraversion, agreeableness, conscientiousness, neuroticism and openness to experience), a consistent, positive association for conscientiousness with academic success was found. The very first examination at the university came out as the most important predictor for academic success, even after 2 and 3 years of study.
According to Gottfried, Fleming and Gottfried (2001) academic intrinsic motivation is a stable construct throughout these years, and with advancement in age, academic intrinsic motivation becomes increasingly stable. A third hypothesis, that the mean level of academic intrinsic motivation declines over these ages, also was supported and significant linear trends were obtained, but it was also found to be modified by particular subject areas, with math showing the greatest decline and social studies showing no significant change. The combination of these 2 aspects of continuity places those with low motivation early in their schooling particularly at risk.

Hishinuma, Foster, Miyamoto, Nishimura, et al (2001) hypothesized, that larger the absolute difference between actual and self-reported performance, the higher were the levels of adjustment difficulties. Students who had a full evaluation were at higher risk based on the six adjustment outcomes.

Pajares (2001) demonstrated that positive psychology variables were stronger in high-achieving students than in low achieving students; boys had stronger perceived authenticity than girls did. Findings indicate that constructs drawn from positive psychology can help explain academic motivation and achievement.

Mau and Bikos (2000) suggested that sex and race significantly predicted educational and vocational aspirations of students. Overall,
students showed increases in educational and occupational aspirations, regardless of sex and race. Compared with other groups, Asian Americans had the greatest increase in educational aspirations. Female students, on the average, had higher educational and vocational aspirations.

Ferguson, Sanders, O’Hehir and James (2000) depicted that both previous academic performance and conscientiousness were related to success in medical training. Conscientiousness also demonstrated incremental validity over previous academic performance. Implications concerning the role of personality in medical election are discussed in terms of trait complexes and trait facets.

2.5.8 Success, Failure and Academic Goals

Spieker and Hinsz (2004) revealed that those who experienced repeated successes set higher personal goals than did those with only a single success. Those findings suggest that situational and personal factors such as reactions to prior successes and failures may influence personal goals on future tasks, but do not seem to have an influence on self-efficacy.

According to Elliot and Thrash (2004) mothers’ and fathers’ fear of failure was also a positive predictor of undergraduate’s adoption of performance-avoidance goals in the classroom, and undergraduate’s fear of failure was shown to mediate this relationship. Fathers’ fear of failure was also a negative predictor of undergraduate’s mastery goal adoption, and this relationship was likewise mediated by undergraduate’s fear of failure. The results are discussed in terms of the reorienting of positive appetitive achievement motivation toward negative, aversive achievement motivation.

Ridgell and Lounsbury (2004) presented and discussed in the context of examining how cognitive and noncognitive variables predict academic
performance, and in terms of implications for using course grade versus GPA as a criterion for collegiate academic performance.

Henkel and Hinsz (2004) hypothesized that success and failure in goal attainment would lead to desired differences in positive and negative affect. Results indicate that success in attaining a goal led to more positive affect and less negative affect, while failure in goal attainment resulted in less positive affect and more negative affect.

Chalk, Meara, Day and Davis (2005) showed that participants who chose a masculine occupation as their most feared job cited reasons of job demands, competition, and doubts about success. Those whose most feared job was a feminine placed importance on the job's low status and others' disappointment.

Holschuh, Nist and Olenjnik (2001) indicated differences in patterns of responses between future goal and emotional items. Moreover, these results are important for learning-to-learn courses designed to teach effective strategy use.

Rawsthorne and Elliot (1999) indicated that the pursuit of performance goals has an undermining effect on intrinsic motivation relative to the pursuit of mastery goals. These findings provide conceptual clarity to the literature on achievement goals and intrinsic motivation and suggest numerous avenues for subsequent empirical work.

Cheung (2000) demonstrated the significant contribution of studying on the student's life satisfaction and studying as a result of attention to public affairs, past achievement, study time, and majoring in social science. They support all hypotheses pertaining to the social construction explanation of studying.

2.5.9 Gender Differences
Lupart, Cannon and Telfer (2004) indicated that younger students were generally more positive about school and future adult life roles than
older students. Major gender differences were found favoring females in English language, arts, and males in science. Gender typical preferences were found for future career aspirations with males selecting science and information technology related careers, and girls selecting artistic and health professions as top choices.

Patton, Bartrum and Creed (2004) showed that for males, optimism and self-esteem influenced career expectations, sequentially predicting career goals, career planning and career exploration. A different pathway was identified for females, with optimism directly influencing career goals, which subsequently predicted career planning and career exploration. Self-esteem predicted career expectations, which then directly influenced career planning and career exploration by bypassing career goals.

According to Christmas-Best and Schmitt-Rodermund (2001) due to ongoing economic and social changes, male adolescents were expected to show increased interest in gender neutral occupations, such as trade and commerce, and female adolescents an increasing concentration into female typical occupational areas, such as health services. This trend was found in the West but not the East until 1998.

According to Farmer, Wardrop and Rotella (1999) both women and men in science careers compared to those in nonscience careers took more high school elective science courses because they wanted to, aspired to higher prestige careers as young adults, and attributed their math successes more to their ability. The male model accounted for more than twice the variance accounted for by the female model.

Kulik (2000) indicated that gender identity affects occupational sex-typing. Specifically, androgynous respondents provide more liberal evaluations of feminine-typed occupations than did the undifferentiated group. Regarding gender role ideology, gender identity was only found to have an impact among the male respondents. Specifically, sex-typed and undifferentiated males expressed more traditional evaluations of
feminine-typed roles than did the androgynous and cross-sex-typed respondents. In addition, an effect was found for gender regardless of gender identity, i.e., the females expressed less sex-typed evaluation of occupations and less traditional perspectives of gender roles than did the males.

2.5.10 Suicidal Ideation and Academic Performance
Martin, Richardson, Bergen, Roeger, et al. (2005) suggested that perceived academic performance, over and above self-esteem and locus of control, in some instances, is a good long-term predictor of suicidality.

Richardson, Bergen, Martin, Roeger, et. al. (2005) revealed that failing academic performance (compared to above average) is associated with a fivefold increased likelihood of a suicide attempt, controlling for self-esteem, locus of control and depressive symptoms. Teachers should note that a student presenting with low self-esteem, depressed mood and perceptions of failure may be at increased risk for suicidal thoughts and behaviors, and need referral for clinical assessment.

Timonen, Villo, Hakko, Väisänen, et al. (2001) prospectively collected a large database of all suicides during 1988-2000 in northern Finland and reported that the proportion of admissions due to psychoses was higher in people in senior positions or with a high level of education than in other employed people.

2.5.11 Achievement and Aggression
Little and Garber (2000) found that for both genders, Neediness directly predicted increases in depressive symptoms, whereas connectedness interacted with social stressors to predict level of anger/aggression. In contrast, the Individualistic-Achievement factor interacted with achievement stressors to predict level of anger/aggression for girls, but not boys.
Boman and Yates (2001) found that optimism together with expectations of negative events accounted for 23% of the variance in school hostility. In addition, optimism was significantly related to classroom involvement and to students' self-reported adjustment. Teachers' ratings of student adjustment were related only to gender. Only 15 (12 male, 3 female) of the 102 students were clearly hostile towards the school.

Aunola, Stattin and Nurmi (2000) revealed that low self-esteem was associated with adolescents' use of maladaptive achievement strategies which, in turn, was associated with their maladjustment at school, and internalizing and externalizing problem behaviors. Moreover, the association between adolescents' maladaptive strategies and their externalizing problem behavior was partly mediated via their school adjustment. The results suggest that the achievement strategies adolescents deploy are reflected not only in their school adjustment but also in their overall problem behavior.

2.5.12 Indian Studies

A delineation of the eastern studies are as follows:

Kaur and Dheer (1982) found no influence of birth order on academic achievement and extraversion-introversion Maudsley Personality Inventory. Middle borns differed significantly from both first borns and later borns on neuroticism-stability dimension. Showing least mean score on the dimension indicating greater emotional stability.

Hussain (1978) reported that there exists difference in anxiety and level of aspiration. Religion and income also have an influence.

Mathur (1986) studied relationship between need achievement and self-disclosure among adolescents. The results indicate that correlation between two variables is positive but not significant in males as in females (males-only body, females-all, except interests and sex). Subject wise science students show more significant correlations between need achievement and areas of self-disclosure. Further
comparison of high and low self disclosure groups on need achievement showed significant difference only on female students.

Irfan, Iqbal, Sandhu and Singh (1993) aimed to study adjustment and achievement motivation in 72 truants and 72 non-truants. Results show that truants are poor on social, emotional, educational and total adjustment in school as well as low on achievement motivation than non-truants.

Gaur, Murthy and Nathawat (2001) carried out a study to examine the influence of intelligence and scholastic achievement on stress and adjustment in male and female adolescent students. Results disclosed that boys were found to have lesser stress as against girls. Furthermore adolescents high on intelligence and achievement had also disclosed significantly lesser. Interaction of gender and intelligence as well as intelligence and achievement, did influence either stress or adjustment in an expected manner.

Nagpal and Wig (1975) indicated that poor-achievers were rather older in age, their parents were less educated, inadequately motivated, inconsistent in studies, and poor academic record and adjustment.

Murthy and Arora (1976) showed no change in attitude towards diagnosis and treatment ability.

Kumar and Didwania (1976) showed high ego-strength and faith in people facilitate self disclosure.

Rajamohan, and Rajarathnam (1979) indicated significantly positive relation between an aspect of locus of control i.e. internality and academic motivation. Mondgil and Sandhya (1979) found that those who scored high on university examinations also scored high on the test meaning good or bad study habits influence academic performance.
Ansari, Sampurna, Udupa, and Agrawal (1979) found significant positive correlations between achievement motive and anxiety. The females had anxiety and achievement motive significantly more than males.

Singh, Singh and Goburbhum (1982) indicated that all the students had some common problems. The foreign students had more problems in health and physical development, social and recreational activities, adjustment to college work, and curriculum and teaching procedure areas while Indian students had financial and moral and religious problems. On the gender basis female foreign students had more problems in adjustment to college work and teaching procedure in comparison to Indian counterparts. The male foreign students also had problems with curriculum and teaching procedures like females.

Chadha (1983) indicated that both groups did not differ significantly on any variable except need for achievement (TAT). The under-aspirers obtained high scores.

Sinha, Trivedi, Gupta and Sinha (1988) showed high achievers were more stable in terms of personality and family environment. A highly significant relationship was observed between high level of intelligence and scholastic achievement.

Kumaraswamy and Ebigbo (1989) revealed that II year students had more positive responses on 'Head' and 'Body' section of the scale, indicating higher emotional stress than III year students.

Barnes and Nagarkar (1989) showed significant improvement in scores on both tests indicating that Yoga facilitates concentration, changes attitudes towards studies and helps in attaining a relaxed state of mind.

Trivedi, Sinha, Sinha, Singh and Gupta (1989) and Sanyal (1991) indicated that high achievers were significantly higher on neuroticism.
and low achievers on extraversion. High achievers were significantly low on somatic anxiety subscale.

Dasgupta and Roy (2005) revealed that acculturated Bengali students showed significantly better coping behaviour, were more modern in their gender role attitude and more flexible in their vocational choice.

**In Sum:** Thus achievement motivation is of significance in present society because of the increasing need to be established that is present in every individual. Inability to fulfill this need may result in different forms of maladaptive behavior.

### 2.6 REASONS FOR LIVING & ITS ASSOCIATED ASPECTS

#### 2.6.1 Rural-Urban Difference and Reasons for living

McLaren and Hopes (2002) found significant differences as a function of residential location. Overall, residents in rural locations reported having significantly more to live for than their urban counterparts. Further analysis of 6 reasons for living (child, family, moral, social, coping and death-related concerns) showed a pattern whereby residents in rural locations reported having the most to live for, followed by regional residents, and urban residents who reported having the least to live for. These findings are in contrast to increase of suicide rates in rural areas, and highlight the need for a greater understanding of the mechanisms underlying suicidal behavior.

#### 2.6.2 Reasons for Living and Suicidal Ideation

Haines and Williams (2003) examined the inherent resources which enable an individual to effectively cope with stress and demonstrated a depressed score for self-mutilators on the scale measuring self-worth and optimism about life. Assessment of the strategies used to cope with real problem demonstrated that self-mutilators engage in more problem
avoidance behaviors. Self mutilators also recorded less perceived control over problem-solving options.

Ryan and Deci (2004) revealed that Terror Management theory emphasizes that self-esteem consists of a sense of meaning and significance, which serves mainly to defend against death awareness. The current authors suggest that self-esteem resulting from defenses against anxiety (whether about death or exclusion) is akin to contingent self-esteem, whereas true self-esteem is based in ongoing satisfaction of needs for competence, autonomy, and relatedness.

Miller, Segal and Coolidge (2001) found that older adults do not manifest suicide ideation differently than younger adults. However, there do appear to be some age-related differences in reasons for not committing suicide. Compared to the younger group, the older group reported moral objections and child related concerns as stronger reasons for not committing suicide. An implication that the identification of specific reasons that deter individuals from committing suicide, may be clinically useful and provide some assistance in suicide prevention efforts.

Mammen, George and Tharyan (2001) concluded that, first, suicide attempters reported significantly higher subjective depression, hopelessness, and suicidal ideation than nonattempters. Second, the depressed patients who had not attempted suicide scored significantly higher on items from the Reasons for Living Inventory than the attempters.

Malone, Oquendo, Haas, Ellis, et al.(2000), revealed that the depressed patients who had not attempted suicide expressed more feelings of responsibility toward family, more fear of social disapproval, more moral objections to suicide, greater survival and coping skills, and a greater fear of suicide than the depressed patients who had attempted suicide. Scores for hopelessness, subjective depression, and suicidal ideation were significantly higher for the suicide attempters. Reasons
for living correlated inversely with the combined score on these measures, considered an indicator of “clinical suicidality”. Results suggest that during a depressive episode, the subjective perception of stressful life events may be more germane to suicidal expression than the objective quantity of such events.

Mascaro and Rosen (2006) conceptualized that existential meaning act as a stress buffer against stressors. Meaningful living has been directly equated with authentic living (Kenyon, 2000). Having more meaning has been related to life-satisfaction (Chamberlain and Zika, 1988) and happiness.

Meaning in life helps the individual to concentrate more on the purpose or goal of his life rather than the negative events. More the individual realizes his purpose for living he becomes happier as “meaning” has been reported as a route to happiness (Seligman, 2002).

Reasons for living is conceptualized as adaptive characteristics such as a set of life sustaining beliefs and expectancies which may be prominent in non-suicidal individuals and act as cognitive barriers in committing suicide or may potentially influence the intensity of suicidal behaviours. Neyra, Range and Goggin (1990) found in an experiment that high suicidal subjects when encountered failure, reported significantly fewer reasons for living than low suicidal individuals. Jon and Leslie (1996) examined that there is a main effect for ideation status with non-ideators scoring higher than ideators on the different positive dimensions of reasons for living. It was also revealed that scores on different Reasons for Living Scales were significantly correlated in expected directions with hope and hopelessness scores (Range and Penton, 1994). Bonner and Rich (1991) conceptualized deficient reasons for living (along with loneliness and irrational beliefs) as vulnerability factors. Similar findings were reported by Westefeld et al. 1992.
Survival and coping beliefs, college and future related concern and moral objection were found to be some of the reasons for living that provides individuals with support and strength (Mascaro et al. 2005).

Thus, overall, meaning exists objectively in unique life events, that the perception of meaning can promote psychological well being, and prevent despair, and that an absence of meaning recognition can promote suicide. Meaning is generally discovered in creative pursuit, in life’s experiences and relationships, and in attitudes taken toward both positive life experiences and the “tragic triad” of pain/ suffering, guilt and death. It is this latter concepts, of finding meaning in suffering, that appears most promising in the prevention of suicide, as in the Nietzschean dictum, “he who has a why to live for can bear with almost any how” (Frankl, 1984).

2.6.3 Race, Reasons for Living, Suicidal Ideation
Gutierrez, Muchlenkamp, Konick and Osman (2005) are of the opinion that the relationship between suicide exposure and current suicidal ideation is mediated by reasons for living and level of depressive symptoms.

Morrison and Downey (2000) depicted that ethnic minority clients do not self-disclose suicidal ideation as readily as their non-minority peers. In addition, a significantly higher number of minority clients were deemed “hidden ideators” because their suicidal ideation only became evident following a suicide risk assessment. European Americans report fewer reasons for choosing not to kill themselves than African Americans, and that African Americans scored significantly higher than European Americans on the moral objections and survival and coping beliefs subscales of the RFL.

2.6.4 Quality of Life and its Predictors
Grant and Higgins (2003) was of the opinion that Promotion pride uniquely predicted a sense of purpose in life or goal directedness. Both
promotion and prevention pride predicted active coping. It is argued that promotion and prevention pride tell us something unique and important about the role of successful self-regulation in determining quality of life.

2.6.5 Reasons for Living, Self Esteem and Violence
Merwin and Ellis (2004) found that for attitudes toward violence, main effects were found for both gender and self-esteem. For reasons for living, a main effect was found for self-esteem but not for gender. An inverse relationship was found between violence and reasons for living. Being male and low self-esteem emerged as predictors of more accepting attitudes toward violence. Low self-esteem was significantly related to fewer reasons for living.

2.6.6 Meaning in Life and Achievement
Geiger, Weinstein and Jones (2004) found that major did not affect PIL scores, but nontraditional status lead to higher scores. Students in the southwestern US had higher PIL scores than students in the upper Midwest area.

2.6.7 Meaning in Life, Beliefs and Well Being
Showalter and Wagener (2000) was of the opinion that adolescents in a Christian community would frequently attribute their meaning in life to beliefs than would adolescents at the non-Christian population. Commitment to a belief is their strongest personal meaning more frequently than any other category when reported in a free response essay format, whereas no adolescents in the previous study reported belief as their strongest meaning.

Compton (2000) investigated whether a sense of meaning and purpose is a significant mediator or the central integrating construct among the primary variables associated with subjective well-being. Meaningfulness
was a significant mediator between personality variables and subjective well-being.

Numerous studies suggest that perceiving a meaning in life is related to positive mental health outcomes while meaninglessness is associated with pathology (Antonovsky, 1979, 1987.; Debats, 1996; Moore, 1997; Reker, 1994; Ruffin, 1984; and Shek, 1991). To achieve meaning one must have high self-esteem, be internally integrated, possess a sense of control over life, and form a satisfactory relationship with the environment (Battista and Almond, 1973).

Durkheim (1951) argued that loss of meaning in life could predispose to suicidal tendencies and this contention has acquired greater force given the observation of high and rising suicide rates among population subgroups whose way of life no longer readily confers meaning.

Perhaps a sense of meaning in life is more important than a fully developed structure for that meaning. Qualitative studies report that relationships are the most frequently cited source of meaning in persons' lives (Debats, 1999). The intimate relationship between positive well-being and meaning in life supports the argument that studying the role of meaning will contribute to an understanding of the determinants of well-being. (Zika and Chamberlain, 1992).

2.6.8 Indian Studies
Gonsalvez and Gon (1983) indicated that pathological groups experienced significantly lower purpose in life (PIL) than normal groups. The degree and pattern of PIL was similar for both pathological groups suggesting that there is a significant correlation between incidence of psychopathology and lack of purpose – in – life.

Mehrotra, S. (1998) indicated that the scores on Reasons for Living Inventory indicated gender differences on reasons for living and hope. Women as a gender are more predisposed to the negativities than men.
Dogra, Basu and Das (2008a) suggested that except stressful life events in the last one year, other predictor variables such as personality, presence of meaning, search for meaning and reasons for living contribute significantly to suicidal ideation. Due to lack of survival and coping beliefs (lack of problem solving skills) and dissatisfaction from family and peer relationships (lack of social support), people are unable to cope with stressors and it leads to suicidal ideation. So reasons for living are adaptive characteristics of non-suicidal individuals that are attributed to or are alleged to prevent the commission of suicide.

Thakur and Basu (2006) focused on examining the role of reasons for living as cognitive barriers and protective factors against suicidal ideation in college students. Significant relations emerged between some of the categories of reasons for living and suicidal ideation. Thus a strong reason for living plays a decisive role in deterring one from contemplating suicide.

Dogra, Kar and Basu (2007) indicated that the presumptive stress in past life decreases with increase in reasons for living. The person uses more survival and coping beliefs to cope with stress. The components of ego functions such as Drive Control, Synthetic Integrative Functioning, Mastery Competence and Adaptive Regression have a significant positive correlation coefficient with reasons for living individually.

Sil and Basu (2007) found significant relationships between trait hope, hopelessness, different dimensions of reasons for living and suicidal ideation. Hopelessness was the highest contributing factor for suicidal ideation followed by two dimensions of reasons for living – poor coping beliefs, and poor positive self evaluation. Thus to help such suicidal individuals to cope with the demands of reality, the counseling programmes should focus on past success, setting more goals, generalized positive expectations, and enriched self-perception.
Mukherjee and Basu (2008) revealed that meaning in life (presence), emotional intelligence and secured attachment pattern contributed significantly to the development of happiness. Emotional intelligence helps a person to feel secure in his relationships which provide a support system. This support system leads an individual to a step further to achieve his life goal or purpose by enhancing meaning and social support itself is a potential source of meaning. Meaning in turn helps the individuals to develop confidence in his guiding values and to feel that his life has a direction which ultimately leads to happiness. Thus these findings can be used in enhancing happiness in individuals by using them in therapeutics and in formulating social skill training programmes.

**In Sum:** Reasons for living may be considered as a protective factor against the morbid thoughts in the form of suicidal ideation which are increasingly being cherished by both younger as well as older individuals.

The above mentioned research findings depict the fact that none of the empirical investigations have attempted to integrate different dimensions of an adolescent's life in to a compact study. Thus, there has been a felt need to extend the frontiers of knowledge of the concerned field by delineating the nature of findings with respect to the psychosocial variables relevant to the life of adolescents and young adults.

After the completion of the relevant literature survey, in the next chapter the methodological details adopted for the present study will be discussed.