CHAPTER-2

REVIEW OF LITERATURE

Researches centered around the effects of anger gained impetus around mid 50s. Over the past fifty years, clinical studies of human anger have appeared in the psychiatric and psychoanalytic literature with increasing regularity, but prior to 1950 there was relatively little research on human anger (Spielberger, 1966). In the following section, studies related to gender differences in anger expression and well-being and relationship of anger expression and measure of well-being have been reviewed. Anger is the negative and certainly amongst the common, emotion that afflict mankind. Although men has shown and experienced distressful state since antiquity. It is only during the past couple of decades that scientific insight into the basic mechanisms has developed (Akiskal & Mekinney, 1973).

Scanning the large body of available research literature provide evidence pertaining to the role of recent and past life events in the pathogenesis of psychological problems especially those falling in the category of affective disorders. Many of the studies dealt upon trying to study anger expression, which were included in previous chapter, while many studies simply
attempted to study well-being (in relation to some components of well-being and different factors affecting subjective well-being), gender, age, some demographic factors, e.g. social status, income, family structure, self-esteem, educational qualification, residential locality etc.

In this chapter a brief review of literature related to gender differences in anger expressions & well-being and the relationship of type of anger expression and subjective well-being, is presented.

Review is based on APA’s Psychological abstracts retrieval system stored in computer network of NATIONAL INFORMATICS CENTRE (MINISTRY OF PLANNING, GOVT. OF INDIA), NEW DELHI. The period is from 1990-99. Some literature survey is based on popular texts of social psychology and abstracts stored in M.D.University, Rohtak Library.

A number of studies have been reported in which gender differences with regard to the anger were studied. Anger-Expression is implicitly defined by Funkenstein King & Dorotte, 1954, Harburg, Hauenstein, Chape, Schull & Schork, 1973, and Gentry, Chesney, Gary, Hall & Harburg, (1982) as a unidimensional construct.
Differences in the anger expression scores of males and females classified as "Anger-in" and "Anger-out" describing in the Harburg (1973) criteria, especially, the anger by sex interactions, suggest that males and females may respond differently to different types of anger provoking situations.

Gentry (1972); (Gentry, chesney, Gary, Hall and Harburg (1982) have clarified the effects of race, sex, socio-ecological stress and life styles on blood pressure and the risk of hypertension.

Pollans (1983) found evidence of an 'anger control' factor for males, but not for females. Finding suggest that college women who overtly express anger have strong control over their angry feelings. The mean scores of the high school males and females on the Ax/Ex, Ax/in, and Ax/out and the correlation among these are reported. Gender differences were evaluated by the analysis of variance. The highly significant F-ratios for the Ax/Ex and Ax/in indicated that the females had substantially higher total anger expression scores than the males, whereas males scored higher on anger in. No differences were found in the Ax/out scores, which were similar for males and females.
Buntaine, Roberta Costenbader & Virginia (1997) undertook to determine self-reported differences in the experience and expression of anger between girls and boys. He used elementary school-aged children in an urban, a suburban and a rural school district. 557, 4th and 5th grade children (287 boys and 270 girls) were given a self-report anger questionnaire. No significant differences were found between boys and girls in the self-reported total anger level. However, item analysis indicated that some of the specific hypothetical situations that elicited anger differed in boys and girls. In addition, there were significant differences in the expression of anger between the boys and girls. Consistent with previous research, boys reported significantly higher levels of aggressive responses. The location in which the children attended school emerged as an important variable with regard to the experience and expression of anger. As a group, Urban youngsters reported significantly higher levels of anger than children who attended school in rural or suburban settings.

In a recent study by Thomas & Sandra (1997) the relationship of anger suppression to blood pressure in women was examined in a university sample of 210 female staff, faculty, and students 18 to 71 years of age. Most were white
and in good or excellent health. The study replicated and extended that of Goldstein, (1988) using their method of assessing anger frequency, intensity, and expression at work (or school) and home. With age, body mass-index, family history of hypertension, and diastolic blood pressure were evident when women suppressed anger at home. Women who had grown up in families that readily showed anger were more likely to do so as adults.

Another study examined the relationship between anger expression, age, and blood pressure in modernizing soman adults, Steele, Matthew, ; McGarvey & Stephen (1997) studied the relationship in a cross-sectional sample of 593 American and Western Samoan adult men and women, 25 to 55 years of age. Anger expression was assessed using a modified 24 item version of the State-Trait Anxiety Inventory composed of anger-in, anger out, and anger control, along with 4 Samoan culture- specific anger items. Age and sex stratified analysis were performed. Body-mass adjusted BP was regressed on the anger expression subscales and age. In women less than or equal to 40 years of age, anger out was significantly and negatively related to adjusted diastolic BP. Young women from American and western Samoa who outwardly expressed anger
least frequently had higher adjusted diastolic BP. The significant influence of anger expression on BP in young modernizing Samoan women may be because (1) increased stress from the interaction of tradition gender role-related domestic demands and more opportunities for individual socio-economic activities, and (2) the culturally normative pattern of suppressed emotional expression.

These findings suggested that people who experience angry reactions are equally likely to express or suppress their anger, whereas persons who experience anger more often because they have angry temperament are more likely to express their anger outward, i.e. toward other persons and objects in the environment.

Harburg, (1973,1979) and Gentry (1981,1982) have reported that persons, who tend to suppress anger have higher systolic and diastolic blood pressure. In a study Dembroske (1984) found that high ratings of potential for hostility and “anger in” were significantly and positively associated with angiographically documented severity of coronary atherosclerosis.

Higher Diastolic Blood Pressure was associated with high Ax/in scores for both sexes. Low Diastolic Blood Pressure
was also found to be associated with higher AX/out scores. However, in contrast to the findings that males were consistently higher than females in Systolic Blood Pressure, the females were consistently higher than the males Diastolic Blood Pressure.

Anger, aggression and hostility have been found to have a negative impact on emotional as well as physical well being (Carmody, Crossen, & Wines, 1989; Engebreton, Matthews and Scheier, 1989; Mook, Vander Ploeg & Kleijn, 1990; Sharma, Ghosh and Spielberger, 1996)

A growing body of research provided evidence that higher negative affectivity (anxiety and anger) plays an important role in the pathogenesis of essential hypertension (Dimsdalem, pierce, schoenfeld, Brown, Zusman and Graham, 1986; Harburg, Gleriberman, Russel & Cooper, 1991; Schnelder, Egan, Johnson, Drobxy & Julius, 1986; Sharma, Krishna and Spielberger, 1996)

With regard to anger it has been widely reported that hypertensive's - as a group tend to experience more anger than normotensives (Baer, Collins, Bourianoff and Ketchel, 1979; Kidson, 1973, Sharma, et. al, 1996; Schneider et al, 1986) Boutelle et. al. 1987, in a study on male and female
hypertensive's found both male and female hypertensive's are to be more anger prone and hostile than their normal counter parts. Some researchers opined, exaggerated cardiovascular response during behavioral challenge to be a mechanism that links hostility and styles of anger expression with hypertension and coronary heart disease (Diamond, 1982; Krantz and Manuck, 1984). Studies relating the relation between anger, hostility or anger expression measures and the magnitude of the increase in blood pressure and heart rate during laboratory challenges relative to resting values, do show-on balance-significant relation (Houiston, 1988). Researchers have attempted to study the association between various measures of anger expression and hypertension and report a significant relationship among them. However, direction of these relationships varies across studies. Some investigators indicate that outward expression of anger is associated with greater blood pressure (e.g. Dembroski, MacDougall, Shields, Petitto and Lushane, 1978; Diamond, Schneiderman, Schwartz, Smith, Vorp and Pasin, 1984; Gentry, Chesney, Gary, Halls, Harburg, 1982; Van Egeran, Abelson and Thornton, 1978), whereas others report that holding anger in (Suppression of anger expressed outward) is a critical factor in development of
essential hypertension (Dimsdale et. al.;1986), Schneider et al,1986;Sharma et al;1996 ). However, others have reported that persons who tend to suppress anger have higher systolic and diastolic blood pressure (Gentary et. al.; 1982; Harburg, Blakelock and Roeper,1979).

Shapiro-David; Goldstini, Iris-Jammer, Lary (1996) explored whether individual difference in 4 personality traits (cynical, hostility, anger-out, anxiety, and defensiveness) would predict waking and sleeping ambulatory Bp and heart rate (HR) and whether information about these traits would provide a source of racial and gender difference in these measure. Ambulatory Bp and HR were recorded over a 24-hr period in 58 Black and 86 white college students. Independent of personality factors, Women had lower ambulatory BP and higher HR than men, and black Ss had higher BP levels and less of a decrease in HR from waking to sleeping than white Ss. The above differences were associated with personality factors. Blacks scoring high on cynical hostility had elevated daytime and nighttime systolic pressure. Blacks scoring high on both anxiety and defensiveness had higher waking diastolic BP. Effects were also shown for HR as a function of anger out, anxiety, and defensiveness.
Spicer, John, Chamberlain, Kerry (1996) examined the individual and joint relationships of cynical hostility, anger-in, anger out, and anger frequency with resting BP using the Cook-Medley hostility scale and the Spielberger anger scales. Multiple regressions were conducted on data from a community sample of 46 men and 59 women to examine the main interactive effects of anger and hostility on BP, controlling for established physical covariates. Diastolic BP was inversely related to anger-in scores in men and women. The only interaction effect was that between cynical hostility and sex on both systolic and diastolic BP. This finding is specific to women, surprisingly strong, and independent of anger experience and of physical correlates of BP. It is suggested that the sex-specific-linked between clinical hostility and BP may reflect a chronic mismatch between the social cognition of cynically Hostile women and same of the cultural and norms that governs women's social lives.

Papps, Benjamin, & O'Carroll, Ronan (1998) examined the level of self esteem and narcissism as personality variables involved in the disposition to experience and anger expression. 338 Ss (aged 17-34 years) were sampled across 2 higher education centers and one student teaching programme in the
U.K. It was reasoned that individuals with both high self-esteem and narcissism would report especially high tendencies to experience and express anger and aggression and that those with high self-esteem and low narcissism would report the lowest. These predictions were influenced by theories that emphasize the role of threats to high self-esteem and narcissism scale produced levels of anger expression in the predicted direction.

DeMoja, Carmelo & Spielberger, Charles (1997) evaluated the differences in the experience, expression and control of anger for young adult drugs addicts and a control group (matched in age, residence, and education) of nondrug users from Southern Italy. The Italian adaptation of Spielberger's State- trait Anger-expression Inventory (STAXI) was administered with standard instructions to both groups. Drugs abusers had significantly higher scores on the STAXI state and trait scales, the trait-angry temperament and reaction subscales, and the anger out and total anger expression scales significantly lower scores on anger control. These findings indicate that the drug abusers experienced anger more often than the non user, drugs addicts were more likely to express
anger toward other persons, or objects in the environment, and had less control of their angry feelings.

Farber, Eugene and Burge-Callaway, Katherine (1998) investigated the differences in anger, hostility and interpersonal aggressiveness in Type A and Type B, adolescents boys ages 15 and 16 years. It was hypothesized that Type A would report greater trait anger and aggressiveness, less confidence in interpersonal relations, and would endorse a pattern of expression of anger and aggressiveness that would differ from type B. No significant differences were found between type A and type B on measures of global-anger and aggressiveness and no significant relationship between interpersonal hostility and self confidence was demonstrated. Type A, however were found to be more likely than Type B to report that they lose their temper and that they act in physically aggressive, verbally aggressive and a passive aggressive ways.

Jerry and Swaim, Randall (1999) have explored the aggressive anger expression in Mexican American and White non-Hispanic adolescents. A three factor model proved best (i.e. expression through verbal assault, Physical assault toward people, and physical assault toward objects): these factors
correlated positively with each other and with anger, anxiety and depression. Correlations of aggressive anger expression styles with anger were larger than their correlations with anxiety and depression. Gender, ethnicity, and developmental effects were found. Males reported more physical assault on people than females, and white non-Hispanic and older youths reported more verbal assault than Mexican American and younger students. Both middle and high school students reported greater verbal assault than physical assault on people. These finding suggest that adolescent aggressive anger expression is not unidimensional, but is more differentiated and meaningfully related to gender, ethnicity and developmental status.

Gowensmith, William, Neil & Bloom, Larry (1997) determined the effect of heavy metal music on listeners self-reported levels of arousal and anger, utilizing individual differences of Ss as a moderating variable 34 heavy metal fans and 35 country fans listened to country music. The state-trait anger expression inventory (Spielberger, 1988 was used to assess prior tendencies and current intensity of anger. The Activation-Deactivation Adjective check-list (R.E.Thager, 1986) was used to assess current intensity of arousal. It was found
that heavy metal music aroused all subjects but that increases in Ss anger levels due to an interaction of heavy metal music and the listener's musical preference. Overall, Ss who identified themselves as heavy metal fans did not show higher levels of anger than subjects who were not heavy metal fans. It is suggested that the effects of heavy metal music are mediated by Ss individual differences and that examination of the effects of heavy metal music should take individual factors of the listeners into account.

Baker, Warren and Bramstone Paul (1997) investigated links between anger, hostility and aggressive behaviour in people with mild intellectual disabilities. The study aimed to determine (1) whether relationships between anger, hostility and aggressive behaviour in a sample of people with mild intellectual disabilities were similar to those found in the general population and (2) whether hostility was linked to aggressive behaviour by the mediating influence of anger. 103 Ss with mild intellectual disabilities (aged 12-61 yrs.) responded to the state-trait Anger expression Inventory, the Cook and Medley Hostility scale, the Aggression Questionnaire, and the MMPI Lie scale. They found that effect of hostility on aggression is mediated by anger. An implication of these
findings is that people with mild intellectual disabilities may benefit from training programs aimed at the cognitive and affective components of aggression.

Stevenson, Howard; Reed, Jocelyn; Bodison, Preston Bishop & Angela (1997) examined the relationship between African American adolescents beliefs in racial socialization and ecologically relevant measures of depressed affect and anger expression. It was expected that a greater belief in racial socialization would be positively related to depressed affect (e.g. awareness of reality). 172 females and 115 males low income inner city African, American, adolescents (mean age 14.6 years) were administered the SORS- A (a measure of aspects of racial socialization) the state-trait Anger Expression Inventory and the multi score depression index. Gender differences were found, and results suggest that beliefs in various types of racial socialization differentially contribute to positive psychological outcomes for adolescents. A cultural ecological framework is used to discuss the resilience and risk of anger expression.

Tivis, Laura; Passons, Oscas & Nixon, Sara (1998) explored the relationships among anger variables, past drinking behaviour and substance abuse. Additionally, the
interrelationship among anger depression, and anxiety in the
groups were examined. 104 alcoholics (sober 21-45 days) and
70 community controls, age 21 to 56, were given the
Spielberger anger expression inventory, the beck depression
inventory and the Spielberger state anxiety inventory.
Alcoholics scored higher than controls on trait anger, Anger/in,
and Ax/out, but not on state anger. There were no main effects
of sex. Ax/in was significantly negatively correlated with the
quantity, frequency index in alcoholic males. Ax/in was
significantly positively correlated with depression in male and
female alcoholics and with substance abuse consequences in
the latter group. The depression measure was significantly
correlated with consequences in female, but not in male
alcoholics.

Granic, Isabela and Butter and Stephen (1998) examined
the relation between anger and antisocial beliefs in a sample of
young offenders and investigated whether scores on either
variable differentiated aggressive from non aggressive
offenders. 22 aggressive and 20 non aggressive young
offenders (age 12-16 yrs.) were compared on the state-trait
anger inventory and the criminal sentiments scale, a test that
assessed antisocial cognition. Results reveal a significant
correlation between the two measures. In addition, aggressive offenders scored significantly higher on anger and antisocial beliefs than non aggressive offenders. These findings extend previous research on characteristics that differentiate aggressive and non-aggressive offenders. Results also support the rationale for incorporating both cognitive and effective components in intervention programs designed for aggressive offenders.

Voegele, Claus; Jarvis, Ann; Chessman Karen (1997) investigated gender-related difference in cardiovascular reactivity and the role of anger inhibition and risk for future hypertension. Tonic blood pressure served as an index of hypertension risk. Twenty eight females and 26 males college students with high, low & normal blood pressure were recruited on the basis of their mean arterial pressure. Continuous measures of heart rate and blood pressure were taken while Ss carried out a series of behavioral maneuvers including mental arithmetic, interpersonal challenge, frustrating psychomotor test and the cold presser test. Ss also completed inventories assessing trait anxiety, trait anger, anger expression, and Type A. Results shows higher cardiovascular reactivity in males than in females and in subjects at risk for hypertension. Within the
male group, a combination of hypertension risk and anger suppression led to the highest reactivity, whereas in females Ss, differences in Anger/in had no effect on reactivity.

Culbertson, Frances, Spielberger Charles-Donald (1996) examined relations between anger expression, anger control and depression and BP, taking gender differences and family constellation into account[Ss] were 179 (9th and 11th grade) students. Anger and depression were assessed by C.D. Spielberger's Anger expression (Ax) scale and the Reynolds Adolescent Depression Scale (RADS). Anger expression (AX/out) scores of participants in this study were slightly higher and suppressed anger (Ax/in) scores were somewhat lower than those reported for normative sample of high school students. AX/in scores were more strongly and positively related to depression than Ax/out scores. Anger control scores (Ax/con) scores were inversely related to depression. Systolic blood pressure (SBP) was negatively related to Ax/in and positively related to Ax/con. Males and Females did not differ on the anger measures, but females had substantially higher RADS scores than the males. Students from single parent families had higher Ax/out and depression scores than those from intact families. They concluded that personality and
emotional concerns should be given as much attention as academic factors in the "learning world" of high school students.

The studies listed in the above section are equivocal in terms of the gender differences in anger expression and distress/depression and self-esteem (measure of well-being). Pollans (1983) reported superiority of females on total anger expression scores and anger out scores whereas Jerry et al (1999) reported that males scored more on physical assault than females. Culbrtson et al (1996) reported no difference in anger expression scores of males and females. Buntaine et al (1997) reported gender differences in total anger expression score in urban and rural youngsters. Urban youngsters scored higher on total anger expression than those who attended schools in rural areas. Differences in anger expression have also been reported in Type-A and Type-B adolescents. Variations in anger expression have also been reported (Demoja et al, 1997) in drug addicts and normal controls. Hence, it is pertinent to investigate the gender differences in college students.

Anger has been reported (Diener et. al., 1991) as a factor of negative affect and it is expected that it should be
negatively related with measures of positive affect. Studies have been conducted to investigated the relationship between anger expression and well-being and have reported that these are differentially related. Culbrtson et al (1996) reported that anger/in was significantly negatively related to depression. Anger/con was inversely related to depression than anger/out. Whereas, Tivis et al (1998) have reported that anger/in was negatively related to depression in males and females. Jerry et al, (1999) have found positive relation between anger expression (Ax/ex and depression & anxiety. Carmody et al (1989); Engeberton et al (1989); Mook et al, (1990); Sharnod et al,(1996) have reported that anger, hostility and aggression have negative impact on well-being. In view of the contradictory findings with respect to gender differences in anger expression and (measures of ) well-being. The present study is proposed to investigate gender differences in anger expression and well-being. Further it also proposed to study the relationship between anger expression and well-being.