CHAPTER - II

REVIEW OF LITERATURE
Understanding the dynamics of aggression has acquired an important place in the present day psychological research. Among the areas of aggression that have been studied, biological and social factors and their relation to aggression have been widely emphasized. An attempt is made in this chapter to mention some of the important works that have been undertaken during the past few decades.

There are many modern psychologists who have emphasized the importance of biological factors on aggression and considerable work has been done in this area. The biological theories of aggression which developed from the psychoanalytical theories represented by Freud and Adler through the ethological theories of Ardrey (1966), Hindle (1970), Lorenz (1966), Storr (1968), Tinbergen (1968), to the implication of the human Karyotype XYY (Price and Whatmore, 1967) emphasize the innateness of the aggressive stimulus response sequence and therefore the difficulties in the control of aggression.

Though many studies carried out in this area emphasized the relationship between the XYY relationship and aggressive behavior (Jacobs, Brulov, Melvile, 1965) there are significant number of studies contradicting the same.

For instance in one study, Price and Whatmore (1967) compared the nine XYY subjects with 18 randomly selected controls from an institution and found that (a) XYY inmates displayed less violence against persons in criminal behavior.
than did control inmates. (b) XYY patients initiated activity approximately years earlier than inmates. (c) they had no significant family history of crime or mental illness, (d) they had no serious personality disorders and (e) but in the past their criminal behavior had proved to be resistant to conventional forms of corrective training and treatment.

In another study by Fox (1971), patients in a mental hospital with criminal background were studied. Even though the patients in the two groups had criminal records of comparable length, the patients with XYY chromosomes displayed in their criminal behavior less violence against persons than did control patients of the 210 occasions on which 18 control males who had been convicted, 46 i.e., 21.9 per cent had been for crimes against the person while 132 i.e., 62.9 percent had been for crimes against property. Conversely the 9 men with XYY chromosomes had been convicted on a total of 92 occasions, but only 8 i.e., 8.7 per cent of these convictions had been for crimes against the person. Whereas, 81 i.e., 68 per cent had been against property.

Among many works done in this area, a study by Casey et al (1973) compared XYY males with fellow inmates. There, XYY subjects had committed more sex offenses and more property offense, than the controls, but committed slightly fewer crimes against other persons. There was no difference in the total number of convictions. In one of the two
institutions studied by Casey's group XXY subjects were first convicted at a significantly earlier age than controls, but in the other institution there was only a negligible difference. The most supporting evidence to this view was provided by an investigation carried out by Witkin et-al (1976) in which a very large group of Danish men (N=4,592) were studied. Of this 4,139 were XXY's, 12 were XXYS and 16 were XXYs. The information regarding the height, intelligence, and past criminal activities of all the subjects, gathered from public recall was analyzed to test several possibilities about the behavior of XXY individuals. The results indicated that, in general the men with XXY Chromosomes were aggressive than XY persons.

Among the other areas of biological determinants of aggressive behavior, physiological aspects have been extensively covered by researchers. Studies conducted by Persky, Zuckerman and Curtis (1968) suggested significant relationship between the activity of the pituitary (Luteinizing Hormone) and feelings of hostility, anger and aggression.

While testing the physiological reactions during aggressive and non-aggressive behaviors, Gentry (1970) studied the effects of frustration, attack and prior training on overt aggressive and vascular processes. In his study 64 male undergraduates were reinforced for aggressive or non-aggressive verbalizations, prior to being subjected
to test failure and/or experimenter's insult. Changes in aggressive (electric shocks) non-aggressive (light signals) behavior of the respondents, were noted among systolic and diastolic pressure. The findings revealed that insult led to greater increase in the strength of aggression than did no insult, aggression training led to a greater increase in the strength of aggression than did non-aggressive training; elevations in diastolic blood pressure were greatest following insult and changes in diastolic pressure were correlated with changes in amount of aggression. In another study Persky, Smith and Basu (1971) took a group of 18 young college males and obtained remarkably high correlations between questionnaire measure of aggression and Plasma testosterone level. They did not find any difference between plasma testosterone level and aggression in an older group of men age (31-66 years) whose hormones production was considerably lower than that of college group.

In one study by Rose, Holaday and Bernstein (1971) on 34 adult male rhesus monkeys, it was found that plasma testosterone levels were positively correlated with behavioural dominance and other aggressive behaviors.

The results were strengthened by another follow up study by Persky, Smith and Basu (1971) two groups of men were derived from the Buss-Durkee Hostility Inventory. The 18 individuals in the younger group ranged from 17 to 26 years of age; the 15 older men were between the ages of 30
and 66 years. The average testosterone production rate of the older men was about half that of younger men, and when all of them were considered as a single group, there was a significant negative correlation \( r = -0.62 \) between age and testosterone production rate. This study showed that, in the younger men, the testosterone production was highly correlated with the scores on aggressive measure.

In another study by Kruz & Rose (1972) aggressive behavior and plasma testosterone levels were assessed in a young criminal population. The subjects were selected to provide a high and a low aggression group, using the number of times that an individual had been placed in solitary confinement as the index for assignment to the two groups. That index was associated with fighting behavior and resulted in highly differentiated groups. Fighters were defined as those individuals who had been in more than one fight during their imprisonment. Plasma testosterone levels were measured in six plasma samples taken within one hour of awakening. Although there was a significant difference between the two groups in terms of actual fighting behavior and in verbal aggression, the differences between the groups on plasma testosterone levels were not significant. Pearson product moment correlations between the number of fights and plasma testosterone level and the number of incidents of verbal aggression and plasma testosterone level were also not significant. Paper pencil tests were also given to the subjects. Hostility was
measured by the Buss-Durkee Hostility inventory, but there was no significant correlation between the hostility test scores and fighting in prison and the hostility scores did not correlate with Plasma testosterone levels. However, an investigation of the type of crime for which the subjects were incarcerated revealed that those individuals who had committed violent and aggressive offenses during adolescence had a significantly higher testosterone level when compared with men without that type of offense. There was also a significant difference between the age of the first conviction of a violent crime and plasma testosterone level. Thus in general the studies suggest significant relation between plasma testosterone level and aggressive behavior.

In one study Rimon, et al (1975), studied 125 women patients admitted to a general hospital using the Buss-Durkee Inventory. The results revealed a highly significant negative correlation between age and aggression. But contradictory results were also indicated by other studies (Stepher, 1984).

The relationship between cruelty to animals during childhood and interpersonal aggression in adulthood were studied by Felthons and Kellert (1984). The sample consisted of 2 aggressive criminals, 18 moderately aggressive criminals, 52 non aggressive criminals and 50 non-criminals. Required information was gathered by interview and survey method pertaining to information
related to attitudes toward animal and human aggression and anti-social behaviour. The results of the study showed a clear relationship between childhood abuse of animals and recurrent violence.

In another study, Husemann, Leonard, Lefkowitz and Walder (1984) studied stability of aggression over time. They collected data on aggressive behaviour spanning 22 years, over 600 subjects (parents and their children). The results revealed that subjects who were more aggressive at the age of 8 years were found to be more aggressive at 30 years of age also. It was further indicated by the study that whatever it is that causes aggression was viewed as a persistent trait influenced by situational variables.

Though a few studies suggest the effect of age on human aggression there is not enough research to suggest any clear pattern of age changes in human aggression. There is an evident need for research with clear designs in this area for consistent results.

Till recently gender differences in aggressive responding was a widely accepted idea. Terman and Tyler (1954) have collected a large body of evidence concerning gender differences related to aggressiveness. In general the evidence of this research is consistent with the idea that males on the average show a lower threshold of aggression than females.
Sociological data, animal studies (Collias, 1944; DeVore 1955; Hebb and Thomson 1954; Scott and Frederiscon 1951), research on Children (Feshbach and Feshbach 1969; Goldberg, Goodfrey and Lewis 1967; Lensky et al. 1961; Levin and Sears 1956; Pedersen and Bell 1970; Sears 1961; Shortell and Biller 1970) and research on adults (Buss 196, 1966, Prasad 1980; Taylor and Epstein 1967) suggest sexual dimorphism in aggression. Indeed, it has sometimes been proposed that women are truly the gentle sex relatively free from aggressive urges (Baron and Ball, 1981).

In recent years systematic research on this issue suggests that women are less aggressive than men only under certain conditions, especially when women believe that such behaviour is inappropriate or inconsistent with feminine sex roles. In situations where such restraints are absent, differences between the sexes may decrease or even totally vanish (Froodi, Maccaulay and Thome 1977). Clear evidence for this view is provided by an experiment conducted by Richardson, Bernstein and Tailor (1979).

In one study, gender differences in indirect aggressive behaviour reactions of 14 boys and 15 girls of 8th grade to a same sex new comer were observed by Feshback and Sones (1971). Following a problem solving session, the group members rated each other's personality. Girls made less favourable judgments of the new comer than did boys. On behaviour interaction measures obtained during the problem solving task, girls displayed less friendly
reactions than boys towards the new comer. The results clearly reflected the developmental consistencies in gender differences in the expression of indirect aggressive behaviour. In another study by Pankatz, Levendisky and Gladin (1976), antecedents of anger over a sample of college students (49 women and 34 men) in a small, private arts college were examined. It was attempted to identify the situations that elicit anger or a loss of temper. Two types of open ended questions, the first type of questions described the situation that made the subjects angry and the other type of questions described situation where the subjects lose their temper, were given to the subjects. The results indicated no gender difference on aggressive behaviour and more antecedents were reported for anger than for loss of temper. However the intensity of anger was reported as greater than that of others by 32 per cent for the men and 20 per cent for women.

However the commonly held hypothesis that men are almost always more physically aggressive than women and that women display more indirect or displaced aggression were not supported in the studies of Prodi, Jacqueline and Thome (1977).

In one study, Steinberg and Dodge (1983) studied 11-aggressive boys, 9 aggressive girls, 11 non-aggressive boys and 9 - non-aggressive girls of 6-8 grades, selected on the basis of peer nominations. The subjects
were divided into pairs of same sex and competed in a block building task. Each subject has discovered that some of his or her blocks had fallen before the experimenter was to award a prize. Results of the study indicated that aggressive subjects of both sexes were more likely to attribute their misfortune to the hostile behaviour of peers than were non-aggressive subjects. Further, aggressive subjects were more frequently the targets of hostile attribution by peers than were non-aggressive subjects, except when subjects were not acquainted with their ratings. Findings of the study supported the hypothesis that children's attributions are a critical part of their deviant aggressive behaviour. This study also indicated that men made hostile attribution more frequently than women.

In one study by Evans (1984), hostility guilt, perception of self and others as a function of gender and sex role orientation was studied. In this study 135 women and 101 men under-graduates indicated their perceptions of sex and hostility guilt for themselves and for typical men or typical women. The Bem Sex Role Inventory and the Mosher Guilt Scales were used. Results of the study indicated that in general men were less guilty than women. Both sexes perceived that the typical women to be more guilty than the typical men and both underestimated the actual level of female guilt. Further, masculine sex typed subjects were less guilty than feminine sex typed subjects. Androgynous females perceived themselves as similar to others of their
gender, while androgynous males perceived themselves as being similar to both males and females. Sex reserved subjects evidenced conflict and inaccuracies in their perception of self versus others. This suggests a significant relationship between hostility guilt and gender and gender-roles. In another study by Blanchard, Barry and Blanchard (1986) differential reactions of men and women to realism, physical damage and emotionality in violent films were studied. The subjects included 176 men and 120 women community college students. The relation between reactions to media violence and self-reports of experience of violence of these students were investigated. No sex differences appeared in ratings of suffering or overall appraisals of violence. Further, the results indicated that women's enjoyment ratings declined clearly for the films rated as depicting more sufferings while those of men did not. The findings of the study suggested that dynamics of violence for men and women maybe different enough to make differential analysis by gender. During the 1940's the drive theories which begin with the frustration - aggression hypothesis of Dollard and his Co-author (1939) came to limelight. They state that frustration always leads to aggression and aggression is always a product of frustration. This hypothesis was soon modified (Miller 1941) in recognition of the fact that frustration can produce a variety of responses in addition to aggression. Others like Berkowitz (1962), Feshbach (1964,1970), Sears, Whiting,
Mowlis and Sears (1953), Whiting and Child (1953) elaborated this theory.

In a study by Berkowitz, Crowin and Hoernyman and Berkowitz (1964), subjects were given a task by an experimenter who was introduced either as a graduate student in speech or a college boxer. The second independent variable was the behavior of the experimenter; he was either neutral or insulting the subject. The subjects were shown a short film (by a second experimenter) depicting either a fraud movie or a brutal fight scene. The subjects who had been insulted, subsequently rated the first experimenter more favorably than those who had not been insulted. In addition, however, the subjects who (a) had been insulted, (b) knew the experimenter as a boxer, and (c) had seen the fight movie, aggressed most vigorously. Berkowitz (1964) reasoned that neither the type of movie nor the classification of the experimenter lead to aggression where no arousal was present. The results suggest that in the presence of arousal aggression occurs.

In another study by Berkowitz and Geen (1966) 120 men were either angered or treated in a neutral fashion in an experimental situation by a person who had been introduced either as Kirk or as Bob. Then they saw either a prize fight in which the actor Kirk Douglas portrayed a rather ruthless boxer, or an equally exciting movie, about a track race. Finally, the participants were given a legitimate opportunity to administer electric shock to
the person who had previously angered them, or treated them neutrally. The greatest number of shocks was given by people who had been made angry, had seen the prize fight and had not the instigator under the name of Kirn. The authors explained their findings by hypotheticoating that the identical names of the prize fighter and instigator heightened aggression.

Some complex relations were found by Kaufman and Macur (1965) concerning the similarity to the subject perceived to exist between himself and fictitious target of aggression. Generally people were less likely to aggress against others similar to themselves than against dissimilar people.

The social learning theories suggest that we learn to be aggressive both by observing models who are aggressive and by being reinforced for our own aggressive behavior. (Bandura 1973), (Geen 1976). They emphasise observational learning reinforcement of aggression and generalization of aggression.

Thibaut (1950) and Popitone and Richling (1955) showed that highly cohesive or tightly knit groups agress more strongly against an insulting outsider than less cohesive groups. A high degree of solidarity in a platoon, in a club or even in a juvenile gang produces a high degree of help behavior for the members of the group and hostility and aggression against threatening outsiders.
Evidence for both the facilitating and modeling influence of film mediated aggressive stimulus is voluminous. (Bandura, 1973; Bandura, Ross & Ross, 1963a; Berkowitz, 1964; Collins & Getz, 1976; Fairchild & Erwin, 1977; Friedrich & Stein, 1973; Greer et al., 1982; Liebert & Baron, 1972; Lovaas, 1961; Marton & Ackar, 1982; Sebastian et al., 1978; Tannebaum & Zillman, 1975; Watt & Kruld, 1977; Wilkin et al., 1974;

Liebert (1979) reviewed more than 50 reports since 1950 and concluded that there is a reliable and socially significant relationship between the amount of violence which a child sees on entertainment from television and the degree to which he or she is aggressive in her attitudes and behaviour.

In one experiment by Berkowitz and LePage (1967) the effects of an elusive factor, "Insult", upon behavior was illustrated. In the experiment they exposed people to insult, while before them on a table lay various neutral objects or weapons. The individuals who saw the aggressive instruments before them responded more violently than the others, even though, their aggressor was purely verbal and they could not utilize those weapons. In other words, the presence of aggressive instruments seems to enhance even those types of aggression, which do not utilize those weapons. It was ascertained that particular situational factors or characteristics elicit and energize learned habits to a greater or a lesser degree.
Experiments conducted by Toch (1968) revealed the importance of various socially learned antecedents to violent confrontation. People learn to categorize and acquire attitudes toward certain situations and persons they learn habitual modes of dealing with them and they are susceptible to the subtle neutral reinforcement.

In another study by Baron (1971) effects of presence of an audience and level of prior anger arousal on adult aggressive behavior were studied. In this study, undergraduate males were first angered or not angered by a confederate of the experimenter and they permitted to attack the individual under one of three conditions, alone in the experimental room (no audience), in the presence of an audience which witnessed their treatment in the hands of the confederate (early audience) or in the presence of an audience which failed to witness these events (late audience). Results indicated that aggression was reduced by the presence of early audience, but not affected by the presence of late audience.

In another study, Hewitt (1975) investigated aggressive displacement under different experimental conditions of attack and inhibition of aggression. Half of the high attacked respondents were placed in high inhibition condition, so that strong inhibitory conditions compete with strong aggressive tendencies. Low attacked control group also received inhibition treatment. High and low attacked
subjects were then confronted with one of four target persons varying in similarity toward whom they could deliver electric shocks. Results showed that under high inhibition, the target most similar to the attacked received more shocks from high attacked subjects than did either the attacked or similar targets.

Joseph, Hoanne and Tedeschi (1978) studied over 60 undergraduates who were employed as naive observers by giving them description of a frequently used paradigm in the study of aggression. They read 13 of 3 sceneries depicting the interaction of two persons in a competitive reaction involving the exchange of electric shocks of various intensities. Results of the study showed that observers were highly consistent with the labeling of behavior. A player was labeled as non-aggressive and good as long as his shock intensity settings were lower than other players and was labeled as aggressive, offensive and bad when he met higher incentives than his opponent. This suggested the significant relationship between incentives and aggressive behavior.

To study the effects of external incentives and aggression pre-disposition on anger reduction, Donfitz and Heidenfelder (1979) received four counter aggression strategies from women under-graduates (N=40) They either were or were not offered a monetary incentive to beat their opponent and were divided into low and high in their initial predisposition to aggression. The results of the study
suggested that subjects low in aggression were unaffected by strategies rather than most responsive to pacifism and subjects high on aggression reduced their aggression to intermediate level. Further an external incentive like monetary reward for beating the opponent did not parallel the aggressive personality as a factor.

Stressing the importance of socialization Eron (1980) suggested measures to reduce the level of aggression in society through intervening at early socialization process of children, so that they learn alternative ways of solving problems and do not have to rely on aggressive techniques to gain their objectives. Eron and Leonard (1980) pointed out that though girls generally demonstrate less aggressive behaviors than boys, they can behave as aggressively as boys.

In another study by Rao and Singh (1981) gender type, income level and age in relation to reaction to frustration were studied. Rozenzweig Picture Frustration Test was used on 150 girls and 150 boys to examine their direction of aggression and reaction to frustration. Results of the study indicated that income and age, both had a pronounced effect on the direction of aggression. But gender differences were conspicuous only in certain ages.

Bhan (1984) studied the relation of aggression to cognitive dimension of personality and environmental factors by comparing responses of 100 aggressive and 300 normal
students in India using a variety of personality tests and questionnaires. The results suggested that higher intelligence level, better economic conditions of the family, cordial family relationship, better health conditions related to less aggressive prone behavior.

Ahmed and Lee (1985) studied the relation between aggressor and victim. They examined measures of aggression in 78 men aged 19 to 24 years placed in two experimental conditions, liking and disliking the confrontation by a confederate. The subjects received either positive or negative personal evaluations related to their performance on a reading task. Dependent measures of blood pressure, use of bogus electric shock on the confederate and evaluation of the confederate were used as indications of aggression. Intensity and duration of electric shocks were also scored. Results showed that subjects were aggressive when given a negative evaluation and when they disliked the confederate. Subjects aggressed with a higher shock level when the confederate was disliked. Blood pressures showed a significant raise for disliked confederate. All measures showed that subjects were more aggressive when hurt by someone they liked suggesting the significant relation between aggressor and victim.

In one cross-cultural study, Bond, Leongkwok and Giacalone (1985) studied the extent of relation of verbal insults to cultural collectivism and power distance. The
assumption in the study is that an act is perceived as aggressive and the actor, thus is negatively evaluated, when that act falls outside legitimate modes of social control. In this study, 56 male Hong-Kong Chinese under graduates and 60 male American under-graduates responded to a scenario describing a business meeting in which a verbal insult was delivered either by a higher status source or a lower status source. Results showed that Chinese in the study were less critical of an insult or and of his/her action as long as he or she had higher status than the in-group target.

In another cross-cultural study by Margalit and Manager (1985) differences in aggressiveness and assertiveness of 58 women and 43 men Israeli and 51 women and 41 men American students (Mean age range 24 - 25 Years) were studied. Results suggested that Israelis of the study generally respond more aggressively than American sample. American respondents showed greater self-confidence, are more willing to accept or give precise answers and are more likely to avoid conflicts. The study suggests that gender differences across cultures were concentrated mainly in the area of aggressiveness with men scoring higher than women. The above mentioned cross-cultural studies emphasise the importance of environmental factors on human aggression.

In one study, Vetro, Csapo and Vargha (1988) used a standard version of the Rosenzweig P-F test to investigate, how TV programmes with aggressive content affect the development of socialization in natural circumstances over
194 adolescents aged 12-16 years. The results indicated that frequent viewers of crime and adventure programmes were significantly more aggressive than those who rarely watched such programmes, regardless of their living situation.

In another study about environmental factors and their effect on aggression, Biswal (1989) investigated relationship among family tension, area of residence, sex and three directions of aggression extra-aggression, Intra-aggression, inaggression described by Rosenzweig (1944). Two hundred and forty eight adolescents aged 11-15 years completed test modelled after the Rosenzweig P-P test and a family tension questionnaire. Results of the study revealed that family tension was related to extra-aggression and in aggression and subjects from high tension families were more extra-aggressive and less inaggressive. Boys were more extra aggressive than girls and area of residence was found not related to directions of aggression. In two experiments conducted by Bushman et-al (1990) hypothesis that observation of media violence elicits thoughts and emotional response related to anguish were tested. In experiment I, highly violent video tapes elicited more aggressive conditions than with a less violent tape. In experiment II, aggressive conditions increased with the level of violence in the video tape and physical assertiveness influenced this effect. Hostility and systolic Blood pressure were higher in response to the most violent video than in response to the other two hostility
was influenced by emotional susceptibility and dissipation—rumination and systolic blood pressure was influenced by emotional susceptibility and assertiveness.

Thus many studies suggest the significant effect of environmental factors on human aggression.

In another study Folk, Nichols, and Peck (1989) examined sex-role attitudes, perceived needs and work slabs in 265 rural women aged 16-64 years. A combination of social, psychological, attitudinal and economic factors discriminated between employees and workers. Ss had more education, lower house-hold income, greater psychological needs and more approving husband attitudes towards employment than home makers and unpaid workers. Unpaid workers did not suffer significantly from full time home-makers in sex-role attitudes, needs, age, religion, education, house-hold income and husbands attitudes.

In one study, Binion (1990) focused the relationship between masculine and feminine personality attributes (as measured by the personal attributes questionnaire), sex-role attitudes and socialization antecedents among a sample of 123 black women, 45 white women and 47 women of other racial backgrounds.

The majority of black subjects reported androgynous sexual identities but have traditional beliefs about the female role in the family. Androgynous women are more likely to be positively identified with both mother and
father. Women who were college graduates had more liberal views about the female role and were more likely to identify themselves as masculine and undifferentiated. In another study Gibbon, Stiles, Morton (1989) examined views of appropriate gender roles and depictions of the ideal man and woman from international students from 44 countries. In 95 adolescents including aged 12-17 years and 77 young adults aged 8-29 years. Males showed greater interest in the physical and sexual attributes of the opposite sex and females greater interest in vice versa qualities were found. In general the subjects differed in their description of the opposite sex ideas based on gender, age and culture.

Clarke (1989) surveyed 595 Australian adults aged 20-30 years over 50 years and examined the existence of occupational sex-typing (OST). Among the occupations studied, 36-40 occupations were sex-typed, 12 as feminine (e.g., Clerical tasks, care taking) and 24 as masculine OST was stronger among men than women and among older than younger subjects. OST was associated with perceived social status of occupations with male occupations being rated more highly than female occupations.

Levy (1989) assessed 30 female and 30 male 3-6 years children gender role knowledge (GRK), gender role flexibility (GRF) and gender schematization (GSC) by having parents complete questionnaires describing as peers of their child's social environment. The results indicated that boys who interacted more with their father and girls who
interacted more with both parents exhibited greater GSC. Children who interacted more with parents displayed less GRS. Girls with mothers who worked outside the home demonstrated greater GRF, and boys with many siblings displayed greater GRK. Children with fewer siblings displayed greater GRF, boys favoring entertainment T.V. demonstrated greater GRK and girls favoring educational T.V. displayed greater GRF. The results suggest that strong relations among cognitive and social variables influence gender role development.

In a study related to sex-role orientation, Krahe (1989) examined the effect of sex-role orientation on accuracy of recall for masculine feminine and gender neutral terms. In study 1, 90 under-graduates completed the Ben Sex-role Inventory [BSRI] and after a 5 min. delay recalled as many terms from the BSRI as they could remember. In study 2, 70 under-graduates studied 60 BSRI attributes presented to them in random order, recalled after a 4 min. delay as many words from the list as they could remember. Results neither of the models received support other research.

In one study, Pliner and Chaiken (1990) studied age, gender and gender-role differences on a number of variables including concerns with eating, body weight, physical appearance, global self esteem and appearance. Self esteem in 334 women and 305 men aged between 10-79 years who visited a participatory science museum was measured.
Results about eating, body weight, and physical appearance and self-esteem showed the differences at all ages.

Tremendous socio-cultural changes are affecting various dimensions of the family life. With changing status of women, socially, politically and economically, the sex-role standards the sex-role stereotypes and may be, the pattern of expression of aggression are fast changing.

In one study Flynn (1990) examined the impact of 59 women under-graduates sex-role attributes (masculinity) and (modernity) over a period of time. They remained with a former pre-martial partner after his first use of violence against them. Subjects were administered instruments measuring experiences with violence, masculinity, sex-role attitudes, amount of violence and degree of love for their partner. Masculinity was not related to how long a woman stayed with a violent partner. More modern sex-role attitudes were associated with shorter amounts of time spent in violent relationships. A further analysis suggested that this relationship may hold only for women who had experienced only one episode of violence.

This indicates that family dynamics is a very important factor influencing human aggressive behavior. But enough research work on this has not been carried out.

Frost (1970) studied the relationship between extroversion and aggressive behaviour using junior Eysenk Personality Inventory as extroversion scale and Frost Self-
Description Questionnaire as an aggression measure. Results of the study indicated that introverts internalize aggression. But the results did not indicate that extroverts externalize aggression.

In another study by Richard and Taylor (1970), aggression as a function of vulnerability to attack was tested. In their study, 30 high need achieving and 30 low need achieving male undergraduates were asked to complete in a task involving ratings with components who attempted to given them increasing shocks. Counter aggression varied as a function of the degree to which subject was vulnerable to the opponents' attack. All conditions of vulnerability evidenced an increase in counter aggression. However, the equal vulnerability condition evidenced the greatest increase in aggression and achievement motivation did not show any effect on aggression.

Schangency and Stransa (1987) studied the relation between self-concept and aggression in elementary school students. In this study, self-report, teacher report and sociometric ratings concerning aggression and self-concepts were obtained on 251 children of grades 2-5. But the results did not show any relationship between self-concept and aggression.

The above review suggest that so many factors like biological, social and environmental variables influence human aggressive behavior affecting it with their
independent as well as interactive effects. Hence to understand the dynamics of human aggressiveness behavior, it is necessary to study manyfolded impact of these variables. But we do not have substantial empirical evidence touching upon the dynamics of human aggression from a global point of view. An attempt is made in the present study to understand the effect of important factors like, gender, age, economic status and gender-role orientation on human aggressive behaviour.