CHAPTER II

REVIEW OF LITERATURE
Criminal behaviour may be defined as the outcome of the interaction of the individual and the environmental factors; the nature of these factors may vary in individual cases and at different times. Poor heredity, subnormal intelligence, endocrinological and physiological disorders, unsatisfactory parent-child relationship, broken homes, low socio-economic status, distasteful occupation, cultural conflicts, personality imbalance, lack of recreation, stimulation of press, movie and other mass media, hysteria or crime wave are some of the potential sources of crime. But none of these factors would surely and without exception produce crime. "A crime is committed only when a peculiar combination of personal and social factors comes into juxtaposition with an utterly unique physical structure of a human being, to create a specified crime situation . . . , the same apparent concatenation of factors might not produce a crime the next time they merge simply because that same precise sameness can never absolutely recur." (Barnes and Teeters, 1959).
Scientific studies to establish a direct link between personality and crime have been difficult to formulate and conduct for obvious reasons. Firstly, a distinct dichotomy does not exist between the two groups: (1) criminals, (2) non-criminals. Not all who are behind bars are real criminals in the sense that the crime committed by them may lack the mens-rea, the intent to commit it. There may be some criminals among those termed non-criminals, who have evaded arrest and conviction by their cleverness. But the number of such persons in each class is very small as compared to the total population. Secondly, no form of behaviour is universally considered to be criminal. McGord (1960) states that no consensus has been reached about the real nature of the personality of criminals. Schuessler and Cressey (1950) after reviewing a study of 113 criminal studies concluded that a criminal personality does not exist. Some of the later studies have, however, confirmed that there is a definite link between personality and criminal behaviour (Hathaway and Monachesi, 1956; Gottfredson and Kelley, 1963; Pasewerk et al., 1971 and Tennenbaum, 1977).
Though personality is of prime importance as a
determiner of crime; there are numerous other factors
involved in its causation. These variables may be
broadly grouped as under:

1. Demographic variables:-
   a) Age.
   b) Sex.
   c) Education.

2. Environmental variables:-
   a) Race and ethnic background.
   b) Socio-economic status.
   c) Urbanisation.
   d) Climate and time of the year.

3. Psychological variables:-
   a) Intelligence.
   b) Personality.

The impact of crime can be interpreted meaningfully
only after an interpretation of these variables. Each one
would be discussed below:

1. Demographic Factors

a) Age and Crime

Age is an important variable in crime. Young people
aged 7-21 years account for 3.3 per cent of the total IPC crimes according to 'Crime in India' (1978). Crime statistics by age represent the existence of a higher rate of crime by younger people. More than 70.0 per cent of the juveniles apprehended belonged to 16-21 year age group (Crime in India, 1978). Sinclair and Chapman (1973) found significant difference in the personality of criminals in relation to the type of crime they commit and the age-level at which the crime has been committed. Mohan and Jaspal (1982) found age emerging a significant factor in crime; their study showed that manifest anxiety, K/L, N and P declined with age in prisoners. Nettler (1974) has concluded that one of the most striking and persistent "conditions" associated with criminality is being young. Delinquency comes to official notice in late childhood, and increases up to 16-17 years of age after which the problem is taken up by courts for adults. The peak of crime is reached in later adolescence and young adulthood and declines gradually with advancing years (Hecckless, 1971).

McClintock and Avison (1968) have demonstrated the higher incidence of crime in teenagers as compared to the rest of the population. According to the Uniform Crime Report of 1973 for U.S.A. young people between 11-25 years of age accounted for 75 per cent of all
arrests for serious crimes. According to Sutherland and Cressy (1968) the age of maximum general criminality is during or shortly before adolescence. Jaspal (1977) in a comprehensive study of personality of criminals at different age levels found a trend of decline with age of the personality variables and intelligence (with a slight increase in the 31-40 age groups); thereby concluding that the crime rate declines with age; as the high scores on the personality variables of P, N and E/I are positively correlated with crime.

Statistics given in Crime in India (1978) show that out of a total of 160919 juveniles arrested during 1978, 40.9 per cent were arrested for crime under I.P.C. and 59.2 per cent for crimes under local and special laws. The percentage involvement of juveniles in the age group of 16-21 years has been showing a steady increase over the years. The overall increase of juveniles arrested in this age group during 1978 depicts an increase of 24.4 per cent over 1977.

A critical scrutiny of the statistics incorporated in crime reports reveals that age has a direct or indirect effect on the type of crime committed. The age of maximum criminality varies with the type of crime, for example, the years during which one is most likely to commit a major crime like murder tends to be the early twenties.
Crime reports show that it is mainly the young adults who have committed violent crimes; while more older criminals generally commit minor offences. Offences involving adventure and fun like automobile thefts are committed by the young age group.

b) Sex and Crime

Crime rates for males are always higher than for females. This applies to all crimes except those that are by definition predominantly female, such as abortion or prostitution. According to Sutherland and Cressey (1946), "the male sex has a great excess of crimes in all nations, all communities, all age groups, and all periods of history for which organised statistics are available." Palak (1950) contends that male crime rate exceeds that of females (cf. Reckless, 1971).

Differences have also been observed among the types of crimes committed by males and females. Offences like burglary, automobile theft, armed robbery, driving while intoxicated are dominated by males while embezzlement, fraud, forgery, larceny, theft and counterfeiting attract a good number of female offenders. Prostitution and commercialised vice are primarily female offences, though men are behind the scenes in these too as managers (Johnson, 1966).
During the recent past there has been a great upsurge in the rate of crimes among women all over the world. In the U.S.A. the rate of arrested women has increased three times of that in 1960, in Great Britain this increase was two-fold over a period of seven years, in Canada the female criminality doubled in the past sixteen years and in Japan there has been a 22 per cent rise in female criminality in the past five years (cf. the German Tribune, October 10, 1976). The rate of criminality among females has increased as women's liberation has succeeded in changing traditional attitudes towards women's role in society and more and more women have started taking an active part in the economic and social life of their respective societies thus becoming more vulnerable and prone to criminal risk. In India, females account for 1.7 per cent of the total arrests under I.P.C. crimes during 1978 (Crime in India, 1978).

A survey of literature shows that a few studies have been made about female criminality in our country, (Ahuja, 1970, 1974; Semasundram, 1973; Sharma, 1976; Yadav, 1976). A. Singh (1980a, 1980b) compared the personality and adjustment of female murderers with those of males and found significant differences between
the two on neuroticism, psychoticism, marital and emotional adjustment.

c) Education and Crime

Next to home, school plays the pivotal role in shaping the personality of an individual. It has the closest contact over the longest period of time with children during their formative and early childhood years, when character is being developed. Education imparted in a formal way is responsible for inculcating the norms and mores of society in the child, which in later life help him keep away from anti-social and criminal conduct through internalisation of restraints. On the other hand faulty education "can leave scars in the psyche of the growing child which may well be related to the development of anti-social attitudes and an ultimate defiance of all authority." (Glueck and Glueck, 1957).

Poor school record has been found to be positively correlated with delinquency in a number of studies (Burt, 1938; Glueck and Glueck, 1957; Weiten, 1960). As evidenced in truancy, revolt against school can be the first tentative step towards crime (Ferguson, 1932, p. 29). Truancy has been found to be associated with multiple convictions to a significant degree.
Norwood East, 1942, p. 140). Burt (1938, p. 336) in his study of juvenile delinquents found nine out of every ten delinquents having studied only up to middle line of average educational attainment. Weston (1960, pp. 133-135) reported an uniform relationship between poor school record and offenders in all the countries. Palmer (1960, pp. 27-37) found murderers having low education.

Mohan and Singh (1977) in a study on education and crime divided the offenders into three educational groups and found that 60 per cent of the murderers belonged to the middle education group (middle to high school level) 22.5 per cent to the high and 17.5 per cent to low education group. Out of the offenders committing crimes other than murder, 35 per cent belonged to the low, 27.5 per cent to the middle and 17.5 per cent to the high education group.

ENVIRONMENTAL VARIABLES

a) Race, Ethnic Background and Castes

The National Commission on the Causes and Prevention of Violence set up in the U.S.A. found that from 1964 to 1967 black crime rates were four times
higher than white crime rates for the four major violent crimes of homicide, rape, robbery and aggravated assault. In 1967 in the same country the black arrest for homicide was seventeen times higher than the rate for whites and twelve times higher for forcible rape. Among juveniles the homicide rate for blacks was seventeen times higher than for whites. Rates were also high for Puerto-Ricans, Mexican-Americans and American Indians in comparison to the proportion of their population. According to Uniform Crime Report (1950-1969), for alcohol-related offenses, the arrest rate for Indians was eight times that of blacks and more than twenty times that of whites (cf. Sue Titus Reid, pp. 59-60). Many studies conducted in America on Race and its relationship to crime point towards higher incidence of crime among the American Negroes, who comprised only 11 per cent of the total population but accounted for 30 per cent of the arrests during the last decade (Cortis and Gatti, 1972, p. 217). Sellin and Wolfgang (1970) found that 82 per cent of the aggravated assaults and 90 per cent of the robberies were committed by Negroes. Negroes dominate arrests for gambling, prostitution, narcotic drugs, robberies, assaults, weapon charges and are frequently involved in fraud and embezzlements (Gibbons, 1968, p. 105).
In India certain tribes in the interior such as Bastar tract and hilly regions, such as Nagaland-Mizoram still go by the name of criminal tribes. The Baurias, the Ouds and Siksins in Panjab are often found leading a nomadic life and indulging in property and other petty type of crime for sustenance.

The caste system in this country has by discriminating against a section of the population in a most degrading fashion, alienated and frustrated the untouchables, the Harijans, and thus contributed to crime among that section. The persons belonging to the low caste feel isolated, devoid of adequate opportunities for self-support and thus tend to take to crime for obvious reasons. Mohan and Singh (1977) conducted a study of murderers and criminals to find the effect of caste on the nature of crime. It was concluded therein that the low caste persons predominantly committed petty crimes like theft, excise violations etc., while serious assaults and murders were found to be the prerogative of the high caste group. Caste thus was found to be a significant determiner of type of crime.

b) Socio-economic Status

Traditional official statistics indicate that mere crime and delinquency exist among the lower than
the upper and middle classes. According to Ernest Burgess's concentric circle theory of city growth (1952) the zone of transition i.e. the physically deteriorated zone just outside the business district of the central city—consistently has the highest rates of crime and delinquency. People who are economically deprived lack many of the social and cultural opportunities of the middle and upper class like good education leading to proper socialisation, adequate opportunities of healthy recreation, neat and spacious living environment. Paucity of these facilities acts as a catalyst for those, predisposed towards criminality, to actually become criminals.

c) Urbanisation and Regional Factor

The crime and delinquency rates are found to be higher in urban than rural areas (Johnson, 1964). Iowa studies by Burrows (1930) and Kansas studies by Smith (1937) point towards a steady increase in delinquency rates from rural to urban areas. Sutherland and Cressey (1966) observed regarding crimes in the United States that the rural rates are slightly higher for homicide, equal for rapes, about one-half as high for assault and about one-fourth as high for robbery, burglary, larceny and auto-theft in comparison to the urban rates.
According to the National Commission of the Causes and Prevention of Violence and the Uniform Crime Reports, violent crime in the United States is a predominant phenomenon of the big cities; property crimes are also higher in the cities than in small towns and rural areas (cf. Sue Titus Reid, 1976, pp. 67-68). Ferri (1917) showed that homicide convictions and crime rates varied from province to province. Useem and Waldner (1942) found that urban crimes mostly comprised of offences against property including fraud, forgery and embezzlement; they also included abortion, vice, political corruption and like, while rural crimes are against property, but tend to be discreet and naive.

The comparative picture in India is parallel to the American scene. Studies by Sharma (1976), Singh, A. (1976), Mohan and Singh, A. (1980b) have shown that the rates of major crimes are high in rural areas as compared to the urban. A survey conducted by the Prisons Department, Punjab (1978) showed that, "the proportion of prisoners presented for murder and attempt to murder was much higher in case of prisoners belonging to rural areas than those to urban areas. On the contrary, prisoners belonging to the urban areas had higher proportion of crimes such as theft, burglary and illicit
trading in contrabands and smuggling." Gupta and Sethi (1974) gave similar findings for Uttar Pradesh, where more than 87 per cent of the murderers hailed from rural areas. Gupta and Srivastava (1977) found that 89 per cent of the murderers out of the prisoners confined in five jails of the state of Uttar Pradesh belonged to rural areas.

Various explanations have been offered to account for the differences in the crime rates of rural and urban areas. Johnson (1966) attributes it to spatial mobility and comparative anonymity of the criminal in urban areas. Reckless (1971) explains it in terms of resort to direct redress by the ruralites of their grudge by the easier arousal of passion in them, on account of comparatively isolated and independent living. Sutherland and Cressey (1966) attributed these to the heterogenous nature of city population, greater opportunities for gainful crime and to the frequent and greater disorganisation of society in urban areas.

d) **Climate and Time of Year**

The cartographic studies attempt to study the influence of climate (temperature, humidity, barometric pressure and so on) topography, natural resources and
geographic location on crime. Adolphe Quetelet (1796-1874) after extensive studies of crime in France, Belgium, Luxembourg, and Holland formulated the 'thermic law of delinquency wherein temperature was thought to be related to crime. In the late nineteenth and early twentieth centuries studies by C. Lombroso, E. Ferri and G. Ascheffenburg showed that crimes against property are greatest in winter and crimes against persons are greatest during summer. Edwin Dexter in his book Weather Influences (1904) reported that crimes of violence were most numerous during warm months and during low humidity and low barometric pressure (cf. Sue Titus Heid, 1976, p. 69).

PSYCHOLOGICAL VARIABLES

1) Intelligence

Intelligence has been defined as the ability to learn (Green, 1953). The more intelligent the individual the better would be his learning. Dull subjects are expected to have poor rates of learning. Mohan and Dharmani (1976) have found an inverse relation between intelligence and verbal conditioning. Eysenck (1970), however, holds that intelligence does not directly affect crime because of conditioning, but affects through suggestibility which is of three kinds:-
(a) primary or motor, (b) secondary or sensory, (c) tertiary or social. Secondary suggestibility is correlated negatively with intelligence, that is, the higher the intelligence the lower will be the suggestibility. Thus individuals of low intelligence would be more suggestible and prone to be led astray by antisocial elements in the society.

Since socialisation is a learning process by which an individual acquires the cultural mores; persons low in intelligence would show poor socialisation which is a pre-requisite of crime. Criminals are thought to be of substandard intelligence as compared to non-criminals; it is thought that on account of their intellectual degeneracy, the criminals are unable to cope with life circumstances in a normal and satisfactory fashion. This argument regarding criminality has grown out of a series of studies of families, The Jukes (Richard L. Dugdale, 1877), The Kalikak Family (H.H. Goddard, 1912), the Jukes in 1915 (A.H. Estabrook, 1916), The Nam Family (A.H. Estabrook and Davenport, 1912) which showed a long family line of misfits. Probably the prisoners are found less intelligent as the more intelligent criminals manoeuvre to escape apprehension. However, recent evidence has related crime to low intelligence.
Deductions regarding socialisation and crime have been made from studies on learning and suggestibility. Some studies have found negligible differences on intelligence between criminals and controls (Murchison, 1926; Tulchin, 1939). Presley and Kirk (1971) found no significant differences in the distribution of Progressive Matrices scores between prisoners and controls.

ii) Personality

Some personality models have been used for understanding the personality of criminals. Pasewark et al. (1971) compared institutionalised male and female offenders with non-offenders on the Edwards Personality Preference Schedule (Edwards, 1959) and found a greater similarity between the male and female offenders than between male and female non-offenders, implying thereby that personality features are common to offenders, whatever the sex. Blackburn (1972) came to the conclusion that behavioural aggression can be predicted from standard self report measures of personality. Analysing the inter-relationship of scores on 17 personality scales, often used in aggression research, he found that four major sets of personality factors emerged namely aggression, hostility, extraversion and
anxiety. The first two factors indicated the readiness to engage in overt aggression and the remaining two factors are reminiscent of the two personality dimensions isolated by Eysenck (1967), that is Extraversion-introversion and Neuroticism-stability. Feldman (1976) observed "Personality test scores do indeed help to predict aggressive behaviour, and the Eysenckian system of personality appears promising."

A number of studies have been conducted to determine which other personality factors are related to crime, by taking different personality models, such as Cattell's (1957) and Eysenck's (1964, 1970). Cattell's second order factor of anxiety has been significantly related to crime (Lykken, 1957; Schelling, 1970; Jaspal, 1977). Eysenck's explanation of the dynamics of crime through his interactionist theory is both lucid and practical. Cattell and his co-workers have suggested a relationship between Cattell's and Eysenck's personality factors.

Eysenck's Personality Theory

The definition of Personality given by Eysenck (1965) runs as "There is some agreement that it
(Personality) refers to some enduring disposition in the constitution of individuals and that it is basic reality underlying individual differences in behaviour." In his book, the "Structure of Human Personality," Eysenck (1953) has defined human conduct as not specific, but as present generality, which leads to different levels of personality organisation of structure which must be hierarchial. Degrees of generality can be operationally defined in terms of correlation. Eysenck extended Jung's theoretical concepts of extraversion and introversion to laboratory setting and real life situations with his dimensional approach to personality at causative and descriptive levels.

Eysenck's personality theory includes four major dimensions: Extroversion, Neuroticism, Psychoticism (on the affective side) and intelligence (cognitive ability) which have been deduced through hypothetico deductive techniques (Eysenck, 1950) and elaborate factor analysis (Eysenck, 1956; Eysenck and Eysenck, 1963).

Over the years his theory (Eysenck, 1952, 1957, 1960a, 1963a, 1963b, 1967, 1970, 1972) has undergone a lot of modification to reach its present status. By dimension Eysenck (1952) meant "focal points of frequently
occurring groups of characteristic concentration of correlated traits which exist along a continuum." The dimension of Extraversion/Introversion (E/I) and Neuroticism (N) are independent of each other (Eysenck, 1947, 1952, 1957; Child, 1964; Bull and Strongman, 1971; Mohan and Kumar, 1973a; and Mohan, 1976).

In the year 1964, Eysenck extended his theory to explain criminal behaviour. He suggested that criminals would score high on measures of E/I and N and cited a number of empirical studies to support this deduction. In 1970 Eysenck revised his theory and added a new dimension of Psychoticism (P) which in addition to E/I and N was involved in the genesis of crime. Each of these three dimensions would be discussed seriatim to review the evidence to date of their relationship to crime.

a) Extraversion/Introversion

On the descriptive side, according to Eysenck and Eysenck (1968) "the typical extravert is sociable, likes parties, has many friends, needs to have people to talk to, and does not like reading or studying by himself. He craves excitement, takes chances, often sticks his neck out, acts on the spur of the moment and is generally an impulsive individual. He is fond of practical jokes,
always has a ready answer, and generally likes change. He is carefree, easy going, optimistic and likes to "laugh and be merry." He is not reliable and cannot keep his feelings under control. The typical introvert is quiet, retiring sort of a person, introspective, fond of books rather than people, is reserved and distant except to intimate friends. He tends to plan ahead, "looks before leaps," and distrusts the impulse of the moment. He does not like excitement, takes daily chores seriously and prefers a well ordered life. He keeps his feelings under control, seldom behaves in an aggressive manner and does not lose his temper easily. He is reliable, pessimistic and attaches great value to ethical standards.

On the causative side Eysenck traces the origin of E/I from Pavlov's (1927, 1941) excitation and inhibition balance in the Central Nervous System (C.N.S.), from Hull's concept of reactive inhibition (Ir) and from Gray's (1965) level of arousal. Eysenck (1963b) gave evidence that differences in individuals on E/I were deeply embedded in the constitution of the individuals, especially in the ascending reticular formation of the C.M.S.
This differentiation in individuals was traced initially by Eysenck in Pavlov's (1927) experiments with dogs, where it was found that all dogs do not condition alike. In some dogs the excitation was quicker, build up of inhibition slower, as such they could be conditioned better (Eysenck, 1955a).

Eysenck extended Pavlovian views to the Jungian typology of extroversion-introversion, by taking the help of Hullian concept of reactive inhibition based on Hull's (1943) first sub-molar principle, "all responses leave in the physical structure a state which acts directly to inhibit the evocation of activity this inhibitory substance manifests through reaction potentials. This negative action is called Reactive Inhibition (Ir), an increment of which is assumed to be generated by every repetition of the response whether reinforced or not and these increments are assumed to accumulate except as they spontaneously disintegrate with the passage of time."

Most of the known differences between extroverts and introverts have been derived by Eysenck (1957) from the Excitation-inhibition theory. His basic assumption is that individuals in whom reactive inhibition is generated quickly which is strong and which dissipates
slowly are pre-disposed towards extraverted behaviour and development of hysterical disorders in case of nervous breakdown; and those in whom reactive inhibition is generated slowly are predisposed towards introverted behaviour and dysthmic disorders in case of nervous breakdown.

Eysenck (1967) relates his conception of the physiological differences between introverts and extraverts to a distinction used by Russian researchers especially Sekolev (1963) and Teplov (1963) of the organisms with ‘weak’ nervous system and organisms with ‘strong’ nervous system (Gray, 1965). Introverts are assumed to have a weak nervous system. Organisms with weak nervous system are assumed to respond at lower levels of stimulation and with greater intensity to stimuli than organisms with strong nervous system (Mohan, 1976). However, the weak nervous system as a result of its extreme reactivity is more subject to protective or transmarginal inhibition than the strong one; which implies that when the levels of excitation cross the optimal mark inhibition sets in which serves to dampen or decrease such excitation.

Eysenck (1967) holds that introverts are more subject to transmarginal inhibition than extraverts.
Eysenck's theory thus assumes some upper level of stimulus intensity by introverts than extroverts. Once this level is reached, new inhibitory processes occur which reduce excitation. However, introverts would reach a level of arousal which produces transmarginal inhibition more rapidly than the extroverts. The obvious result of the operation of this form of inhibition is that at high levels of stimulus intensity cortical arousal is lower for introverts as compared to extroverts. Eysenck (1970) also believed that the ascending reticular activating system (ARAS) is responsible for producing arousal in response to external stimulation. This state of arousal under identical stimulating conditions is higher in introverts than in extroverts. Introverts are thus assumed to have a lower threshold of reticular arousal than extroverts (Eysenck, 1963).

E/I and Criminality

While postulating his theory of crime Eysenck (1964, 1970) opined that propensity to crime is universal, but it is held in check in most of the cases by a person's "conscience." This "conscience" is essentially a generalised set of conditioned responses built up during the childhood and adolescence, in the process of
socialisation, according to Pavlovian conditioning. As extraverted persons condition less well as compared to introverts they have an under-developed "conscience" hence are more prone to anti-social conduct and crime.

Mowrer (1950) holds that socialisation is mediated by learning in two stages (1) fear responses are conditioned to cues associated with punishment or withdrawal of love. (2) in the second stage, responses that are instrumental in removing the individual from the fear producing cues, for example, inhibition of the forbidden behaviour, are reinforced by fear reduction. Crime may be regarded as a failure to condition the fear responses to earlier punished or disapproved acts.

Highly extraverted subjects are considered to condition less efficiently, due to a more rapid growth of cortical inhibition (Eysenck, 1957, 1967). Under identical conditions, cortical arousal would be more marked in introverts; cortical inhibition in extraverts (Eysenck, 1967).

Passingham (1972) has summed up Eysenck's theory of criminality regarding conditioning in extraverts as follows: (i) extraverts condition badly, (ii) socialisation is mediated by conditioning, (iii) extraverts will tend to be poorly socialised, (iv) two predictions would
follow from this (a) criminals will tend to be extroverted, 
(b) criminals will tend to condition badly.

A number of studies have supported Eysenck’s (1964, 1970) theory regarding relationship of E/I and criminality. Eysenck and Pernell (1962), Seigman (1962), Trasker (1962), Klerx and Kelley (1963), Syed (in Eysenck, 1964) obtained positive results about criminals being extroverted. Eysenck and Eysenck (1973) found female prisoners scoring higher on E/I, Wilson and Maclean (1974) found recidivists, more extroverted than the controls, that is, trainee bus drivers.

Some studies in India (Singh and Akter, 1971; Akter and Singh, 1973; Sharmugam, 1975; Singh, A., 1979b) have obtained results supporting the contention that criminals have high extraverted scores as compared to non-criminals.

Some of the other studies have reported no significant difference on E/I between normals and criminals. Bartholomew (1957, 1959, 1963), Field (1960), Fitch (1962), Little (1963), Moghuii and Forrest (1965), Nekazracher and Watson (1968), Schalling and Holmberg (1968), Mohan and Singh (1979a) found no significant difference on the E/I dimension between criminals and normals.
Some of the studies have found criminals scoring lower on E/I in comparison to the non-criminals, for example, Millman (1966), Berry (1966), Forrest and Hoghughi (1968), Jaspal (1977).

There may be different reasons for the inconsistency in the studies of E/I scores of criminals and non-criminals. One may be the different testing devices used in different studies. The other reason is advanced by Schalling and Holmberg (1970) that the inconsistent results may be related to the fact that E/I is a 'higher order' factor resulting from intercorrelations of primary factors of sociability and impulsivity. It is the impulsivity component of the higher order factor of extraversion which is higher for criminals while the sociability component is lower. The results based on the overall means of the two components may thus depict the criminals low on extraversion as compared to the non-criminals. Eysenck (1970) later modified his theory of criminality as regards E/I stating that, "it is the impulsivity component of E/I rather than the sociability component which we may consider to be associated with criminal behaviour."

Dual Nature of Extroversion

In 1963 Eysenck and Eysenck formulated a theory
about the dual nature of Extroversion asserting that sociability and impulsivity are primary traits contributing to the higher order E/I factor. They suggested that the two components may differ with regard to the relative importance of environmental versus genetic influences - sociability being more easily subject to environmental influences and impulsivity having deeper roots in heredity (Schalling and Holmberg, 1970). These two factors of sociability and impulsivity correlate around 0.5 (Eysenck, 1964).

Schalling (1970) holds that the concept of impulsiveness as used in certain psychiatric writings refers to a breakthrough in behaviour of unconscious strong inner urges in a context of tension and conflict. It implies weak restraints (Cleckley, 1964) and inability to delay gratification (Buss, 1966). The main difference lies in the intrapsychic concomitants of the impulsive behaviour (Peterson, Guay and Cameron, 1959). Impulsiveness thus includes a lack of planning and foresight, a giving into 'whim' without visible signs of emotional turmoil, tension or conflict (Schalling, 1970). Impulsiveness has the connotation of rapid action without deliberation or hesitation, without
having decided or planned the act. On the other hand, sociability envisages a liking for the company of others (Eysenck, 1976).

Schalling and Holmberg (1970) contend that the relations between cortical arousal, conditionability and extraversion, as postulated by Eysenck, are valid only for the impulsiveness component of extraversion. Hence it is expected that criminals would be higher on impulsiveness but lower on sociability in comparison to the non-criminals.

Ruch (1970) observed, "there seems to be considerable evidence that delinquents are more impulsive than non-delinquents, that is they tend to act before thinking." A number of studies have used psychomotor tasks in a laboratory situation to test the relationship between impulsiveness and offending behaviour, presuming that impulsiveness as a trait would be revealed in the form of errors made due to overhasty responding (Feldman, 1976). Experiments were conducted by Kelley and Veldman (1964) on seventh grade male students, of approximately thirteen years of age, of four Texas towns during 1957 and 1958 on symbolic language tests, four psychomotor tests and several self-report measures of surgency (884 pupils). In 1962, 424 of the original sample were reconstructed; thirty-two
were officially labelled offenders, fifty-two had dropped out of school and the remainder were still in school. These three groups were compared for their scores on the original measures. No difference was noticed on the symbolic language tests, but both the offender and the dropout groups had obtained higher surgency scores and had made many more errors on the psychomotor tasks than the other children. Thus the results showed a greater impulsiveness in the offenders and the dropouts.

Erickson (1966) in a comparative study of conforming and non-conforming prisoners of an institution on Porteous maze test found that the former made significantly fewer errors. Gibson (1964), Martin and Warde (1971) in similar studies have found delinquents more impulsive than the non-delinquents. A number of studies have reported impulsive behaviour to be the most important single characteristic of psychopathy, which has a significant bearing on criminality (Arieti, 1963; Craft, 1966; Buss, 1966).

Schalling (1970) in a study on "Extroversion in criminals and the Dual nature of Extroversion" found a relation between solidity in the Swedish Mark Ayman Temperament Inventory (MNT) and E-impulsiveness.
Sanocki (1969) item analysed the subjects responses on the E/I dimension of MPI (Eysenck, 1959) in a study on the personality of criminals and found them scoring significantly higher on impulsivity rather than sociability. Eysenck and Eysenck (1971) have confirmed the finding that it is the impulsivity rather than the sociability which differentiates the criminals from the normals. Singh A. (1980) found murderers scoring higher on impulsivity than the non-criminals.

b) Neuroticism

According to Eysenck (1953, 1957), Neuroticism (N), on the descriptive side, refers to the "emotional lability or ever-responsiveness of a person and likelihood of breakdown under stress." The general nature of N is assessed as instability, unadaptability, depressive moods, weak dependable attitudes, narrow interests, symptoms of nervous breakdown (Mahan, 1976). Individuals scoring high on N tend to have difficulties in returning to normal state after emotional experiences. They frequently complain of vague somatic upsets of minor kind such as headaches, digestive troubles, insomnia, backaches etc. and also report many worries, and other disagreeable emotional feelings.

On the causative side, N is based on neurophysiological model and has been elaborated from the Hullian theory of
Drive. Neuroticism is thus, considered as a general factor in motivation or striving (Hull and Lindsey, 1962). Individuals tend to respond to stress with the activation of specific parts of the sympathetic nervous system, regardless of the type of stimulation received, rather than responding with all the parts of the sympathetic nervous system simultaneously (Brody, 1972). Eysenck (1960) suggests that the neurotics are more amenable to sympathetic nervous functioning and the stables to parasympathetic functioning. Eysenck (1963) is of the view that the differences between individuals in Neuroticism are mediated by inherited differences in the lability and excitability of the autonomic nervous system. Some persons are constitutionally predisposed to react strongly to the incoming stimuli while the others are predisposed to act much less strongly. According to Brody (1972), "emotional lability is thought by Eysenck to be dependent upon activity of quasi-independent physiological system called the visceral brain including the hippocampus, amygdala, cingulum and hypothalamus." Differences, in threshold of activity of the Visceral brain are presumed to be the physiological basis of individual differences in the Neuroticism-Stability dimension. Arousal of the visceral brain leads to the arousal of the reticular activating system (ARAS) but not the converse (Brody, 1972). As a result, the
individuals with extremely low threshold for emotional arousal are high on Neuroticism; they also tend to be introverted because high levels of arousal of the visceral brain system leads to arousal of the reticular activating system (Brody, 1972). Thus N, which is conceived to be a predisposition to strong autonomic activation also produces higher cortical arousal (McLaughlin and Eysenck, 1957). According to Davis and Tune (1970) arousal state in an individual can affect his behaviour.

N complements E/I in explaining behaviour. It is considered as a general factor in motivation or striving (Hull and Lindzey, 1962) and is autonomic drive (Furneaux, 1961; Eysenck and White, 1964). Lazarus, Deese and Osler (1952) had earlier described this motivational force to possess, "energising and directive properties." Leuba (1953), Feldman (1964) and Alderman et al. (1967) hypothesized that higher the drive "the less will be the increment of stimulation required to reach optimal stimulation and lower the drive, the greater the increment of stimulation necessary to reach optimal level." As suggested by Mohan (1976), "how far this motivational force will retain its energizing and directive aspects and not
become disorganising and disruptive ones due to emotional accompaniments, will determine the prediction of effects of $N$ on performance in learning tasks. Since motivation is linked to learning ability, it could be deduced that $N$ would be related to learning.

Myers (1965) argues that "under certain conditions, neurotics will condition better than non-neurotics. Where anxiety is a relative drive, it should multiply with habit to produce better conditioning." Iowa studies (e.g. Spence, 1957; Baron and Conner, 1960), Mohan and Claire (1968), Mohan, J. (1979) found that neurotics condition better than the stables.

Mohan (1976) has cited some studies which have failed to support the above contention e.g. Hilgard, Jones and Kaplan (1951), Field and Brengleman (1961), Mohan, Rajinder and Mehra (1974). Passingham (1972) emphasises that the learning of an avoidance response involves two states: (i) the acquisition of a conditioned emotional response (CER), and (ii) the acquisition of an instrumental avoidance response (IAR). Though high anxiety may lead to better learning of CER, it may also lead to poorer learning on an IAR by the operation of the Yerkes-Dodson Law (Jones, 1960). Thus it cannot be predicted whether the neurotics would
learn such responses better or worse. Mohan and Kumar (1976) clearly established curvilinearity in the relation of N and performance.

**Neuroticism and Crime**

Eysenck (1964, 1970) has postulated that anti-social behaviour is a result of poor conditionability. Since behaviour of adult life is learnt through socialisation techniques during childhood, neurotics, on account of their higher autonomic drive levels, tend to fare poorly as compared to stables with a more optimal drive level for learning performance. Eysenck (1967) also holds that persons high on N have a highly labile ANS. When N is high it interferes with the efficient learning of responses, particularly to unpleasant stimuli because of the irrelevant anxiety evoked (Feldman, 1976). Obvious conclusion is that socialisation which, according to Eysenck, is achieved by fear arousing stimuli, will be interfered with by a high level of N and therefore anti-social conduct would be more evident among Neurotics.

Passingham (1970) and Burgess (1972) while reviewing Eysenck's theory of criminality as regards N, summed it up as: (i) neurotics are high on anxiety or emotionality, (ii) Neuroticism acts as a drive
reinforcing extraverted or introverted tendencies favouring or disfavouring anti-social conduct, and
(iii) neurotics with habitual anti-social response will tend to engage in those responses more strongly than non-neurotics.

The relationship of Neuroticism to crime has been investigated in a number of studies. Bartholomew (1957, 1959), Field (1960), Fitch (1962), Sved (1964), Berry (1966), Millman (1966), Price (1968), Eysenck and Eysenck (1971) and Burgess (1972) all found consistently higher N scores in prisoners as compared to non-criminals. Feldman (1976) found recidivists higher on neuroticism as compared to first offenders. Gibson (1967a) and Hoghughi and Forrest (1970) on a study of younger male prisoners reported higher N scores for prisoners as compared to normal population and found the N scores rising with the degree of misbehaviour within the institution. Some other studies by Gibson (1967b), Allsopp (1968) and Saxby et al. (1970) (both studies unpublished; quoted in Feldman, 1976) showed that self-reported offending is positively related to N. Studies on female prisoners by Bartholomew (1963), Eysenck and Eysenck (1973) and Saxby et al. (1970) have all supported the hypothesis that prisoners are higher on N than the controls.
Some of the Indian studies have confirmed the above results. Agarwal (1961), Shanmugam (1973), Singh, U.P. (1973), Singh A. (1980), Mohan and Singh (1980), Singh A. (1981) have all found criminals scoring higher on N as compared to non-criminals. Singh A. (1978) found truancy in high school boys positively correlated with N. Studies on female prisoners in India by Yadav (1977) and Singh, A. (1980) have also reported high N scores for prisoners. Mohan and Singh (1980) found criminals scoring high on N as compared to non-criminals.

However, some researchers like Little (1963), Hoghughi and Forrest (1965) and Sanocki (1969) did not find any difference between the N scores of criminals and non-criminals. Jaspal (1977) found criminals scoring significantly lower on N as compared to non-criminals.

There have been relatively very few studies on N and type of crime (Hindelang and Weis, 1972; Eysenck et al., 1977). N has been found to be significantly related to murder and aggravated assault (Sethi et al., 1976; Yadav, 1977; Singh A., 1979a, 1979b, 1980). K. Mani (1978), however, found non-murders higher on N than murderers.
Banister, Smith, Hoskin and Bolton (1973) studied the psychological correlates of long term imprisonment on personality variables and did not obtain any significant differences between four groups of criminals on N measured by aP1 N scale. Cochrane (1974) did not find a clear link between aP1 and N. Another study to find the effects of imprisonment on prisoners was done through "a simulated prison" situation set up in the cellars of the Psychology Department of Stanford University for an intended period of two weeks by Haney et al. (1973). Subjects in this study were stable and mature undergraduates selected carefully after testing and having least severe histories of antisocial behaviour. They were randomly assigned to serve as guards or prisoners. The experiment had to be stopped after six days only on account of the growing distress of the prisoners, five among whom had to be released even earlier than six days on account of extreme depression and anxiety. The analysis of scores obtained on aP1 on these "prisoners" showed that the early released "prisoners" were more extraverted less empathic, confirming and authoritarian than those who stayed till termination.

The bulk of evidence, available to date, is thus on the side of criminals tending to score higher on N as compared to non-criminals.
Eysenck discovered a third dimension of personality unrelated to the two already existing ones; this he called psychoticism \((P)\). Originally the notion of a \(P\) factor arose from the observations of close relatives of schizophrenics and manic-depressive patients among whom were found an unduly large number of psychotics. Eysenck opined that \(P\) is perhaps most consistently linked with crime. This concept has some similarity to the assumption that benign psychosis may arise from unspecific vulnerability (Weiner and Strengen, 1958; and Eysenck, 1970c). The hypothesis is based on the finding that generally psychotics of all types tend to behave in experimental situations and on laboratory tests of a psychological nature, very much like one another and unlike neurotics. The work of Eysenck (1952, 1955, 1959) and in particular of S.B.G. Eysenck (1956) and Devadasan (1964) strongly argue for a separate dimension of psychoticism. More recent studies by Eysenck (1968, 1969) have demonstrated the possibility of embodying this conception of \(P\) in the form of a personality inventory.

On the descriptive side, a person high on \(P\) is characterized by the following traits: (1) Solitary, not caring for other people; (2) troublesome, not
fitting in; (c) cruel, inhumane, (4) lack of feeling, insensitive (5) lacking in empathy; (6) sensation-seeking, avid for strong sensory stimuli; (7) hostile to others; aggressive; (8) liking for odd and unusual things; (9) disregard for dangers, foolhardy; (10) likes to make fools of other people; and to upset them." (Eysenck, 1970).

Psychoticism and Crime

Eysenck (1970) advances two reasons for the view that P, in addition to E/I and N may be implicated in the causation of criminality. One reason is that the traits listed above resemble rather closely those which are displayed by criminals. Though all criminals may not possess all these traits but it is observed that generally the most difficult, inveterate and incurable criminals seem to resemble this description. The other reason lies in the oft repeated psychiatric observation that psychosis (particularly schizophrenia) and criminality have a particularly close connection. Eysenck (1970c) gives some empirical data linking criminality with P. Some of the relevant studies are given below:
Odgaard (1963) found 10 per cent psychopaths, criminals or alcoholics out of the first degree relatives of psychotic probands. Essen-Moller (1946) and Planensky (1966) have reviewed many other earlier reports of such an association. Medor (1914) and Rudin (1916) had found a number of criminals and alcoholics among the relatives of the schizophrenics. These studies could be criticized by pointing out the possibility of parental psychotic behaviour being implicated in the psychopathic and criminal conduct of their offspring. Heaton (1966) in a study controlled the environmental influence by raising the children born to schizophrenic mothers in foster homes. His results show that nine out of forty-seven of these children were sociopathic personalities showing anti-social behaviour of an impulsive, illogical nature, with long police records (only four of these children developed schizophrenia).

All these studies illustrate that psychoticism and criminality have many common features. However, it does not imply that all of the criminals are psychotic.

In an empirical study Eysenck and Eysenck (1970) found prisoners scoring significantly higher on psychoticism as compared to normals. Segraves (1969)
in a comparative study of drug-taking and non-drug taking students found the former significantly higher on P.

Eysenck and Eysenck (1971) in a comparative study of criminals and matched controls, found prisoners significantly higher on P and N. Wilson and Maclean (1974) found supportive evidence to Eysenckian contention that criminals are more psychotic than controls.

Caine, Foulde and Hope (1967) found psychotics and criminals having elevated scores on their hostility scales thereby showing that hostility is an important aspect of P. The Bristol Social Adjustment Guide (Scott, 1960) has been found to distinguish well between criminals and non-criminal adolescents on P items (hostility to adults, children and withdrawal).

According to Eysenck and Eysenck (1973) there is a close relation between P and masculinity; men on the average score higher on P than women, but in their study on the personality of female prisoners, they found female prisoners scoring higher on P.

Some of the Indian studies have also found prisoners scoring high on P. Shammugam (1975) in a study of personality pattern among delinquents found delinquents
both boys and girls higher on P as compared to non-delinquents. In other investigations by Shanmugam (1996, 1997, 1998) in which sex delinquent women were compared with normal women, similar results were found. In one other study of the delinquent boys Shanmugam (1956, 1957) found the following results: (a) the delinquent boys reacted unfavourably to stress from the environment by manifesting aggressive behaviour whereas the normal boys manifested anxiety, (b) the delinquent boys generally manifested hatred, rebellion, violence, suicidal tendencies, insecurity and sense of failure, whereas 'normal' boys generally manifested traits of hope, courage, confidence and faith. Shanmugam and Sundri (1960) found that the delinquent behaviour once set in an individual, may be difficult to modify. Singh A. (1976, 1979, 1980), Mohan and Singh (1982) in a study on the personality of criminals found them scoring very high on P. Jaspel (1977) found criminals committing major crimes higher on P than criminals committing minor crimes. Mani K. (1978) found violent criminals showing tendencies of high P.

Thus all the studies conducted on criminals and delinquents to date have given a consistent finding of higher P scores in these classes.
The term 'Motive' has been used to refer to the disposition within the person to strive to approach a certain class of positive incentives (goals) or to avoid a certain class of negative incentives (threats) (Atkinson, 1966, p. 303). Traditionally motives are supposed to drive, direct or select behaviour. They have their origin in childhood experiences, are relatively stable and persist during the later part of life. The motives remain latent, with respect to overt adaptive behaviour, until the cues of a situation arouse the appropriate expectancy of goal attainment through performance of some act. How one would act at a particular time is thus determined by the interaction of his motives with the situation of the moment (which may be a crime situation). Thus motives would be strong variables effecting the overt action of a person in any crime situation.

Atkinson (1957) differentiates between "motives" and "motivation." The former refers to "potential motivation" and the latter to "actual motivation" under the specified conditions of "probability of success" (expectancy) and the associated "incentives" (the
relative attractiveness or unattractiveness of the end state, or the goal sought). His theory asserts that a person's motive to achieve, his motive to avoid failure, and his expectation of success in some venture, strongly influence the character of his motivation as expressed in level of aspiration, preference for risk, willingness to put forth effort, and to persist in an activity (Atkinson and Feather, 1966).

Murray (1938) conceived a need as "... a construct (a convenient fiction or hypothetical concept) which stands for a force (the physio-chemical nature of which is unknown) in the brain region, a force which organises perception, apperception, intellect, conation and action in such a way as to transform in a certain direction an existing, unsatisfying situation" (Murray, 1938, pp. 123-124).

Atkinson and McClelland (1961) have shown that needs can be an integral part of personality and that workers select their jobs because they see potentialities for the satisfaction of their needs. Motives are the "root" of human action which is manifested in different surface effects. A motive is defined as "the re-integration by a cue of a change in an effective
situation" (McClelland, Atkinson, Clark, and Lowell, 1953, p. 28). Thus a motive is, "a strong affective association, characterised by an anticipatory goal reaction and based on past association of certain cues with pleasure or pain" (McClelland, 1951, p. 466).

Most of the research in the area of motives to date has been concentrated in the field of business management. There is a relative paucity of work relating motives to crime. However, Cortes and Gatti (1966) worked on the motives/needs of delinquents and compared these to the needs of non-delinquents.

Over the past two decades, a lot of research has been done in the study of the three most important needs - achievement, affiliation and power, and their correlates in human behaviour.

Need for Achievement

Murray (1938) defines m'ach as follows: "the desire or tendency to do things as rapidly and/or as well as possible. It also includes the desire to accomplish something difficult. To master, manipulate and organise physical objects, human beings or ideas. To do this as rapidly and independently as possible. To overcome obstacles and attain a high standard. To excel one's
self. To rival and surpass others. To increase self-regard by the successful exercise of talent."

Cattell (1965) observes about the make up of n-Ach, "The motivation towards achievement can be shown actually to spring from three distinct dynamic sources; (a) the self-sentiment, (b) the super-ego and (c) a simple ego of self-assertiveness, akin to that which shows itself in display in male mammals . . . ." Adler's concept of 'inferiority complex', 'masculine protest' and 'striving for superiority' all point to the gratification of n-Ach. Lewin (1935) studied the upward striving nature of human achievement and gave the level of aspiration paradigm. Murray's (1938) system of personality study gave an important place to human needs. It was he who developed the idea of a hierarchy of basic psychogenic needs and used for the first time the form n-Ach. McClelland et al. (1953) regarded n-Ach as a social motive and equated it to an inner concern with achievement, a disposition to engage in activities in which doing well or competing with a standard of excellence was important. More recently McClelland (1961, 1963) regarded n-Ach as a desire for excellence not so much for the sake of social recognition as to attain an inner feeling of personal accomplishment.

From the early days of research on n-Ach, there has
been an attempt to differentiate between the tendency to achieve (Hope of Success, HS) and the tendency to avoid failure (Fear of Failure, FF) (Clark, 1948; Atkinson, 1953; McClelland and Libberman, 1949; McArthur, 1953; Clark, Teevan, and Riccinti, 1956). HS is defined as the striving to increase or keep as high as possible one's own capability in all activities in which a standard of excellence is thought to apply and where the execution of such activities can, therefore, either succeed or fail (Heckhausen, 1967, pp. 4-5).

Bendig (1959a, 1964) had separated Personal Need Achievement (PNA) from Social Need Achievement (SNA). Later, Veroff (1969) distinguished between "autonomous achievement motivation" and "social recognition achievement motivation", which formed the background for the definition of Intrinsic need for Achievement (I-nAch) and Extrinsic need for Achievement (E-nAch) as they stand today -

I-nAch .. Concern over standards of excellence or doing something well for its own sake, i.e., to attain an inner feeling of personal accomplishment, without regard to other benefits.
Concern over success in competition with others, involving social comparison and social recognition.

McClelland and Atkinson (1953) developed a projective technique based on Murray's Thematic Apperception Test to measure nAch. Following their lead, a few more projective and questionnaire devices have been developed to measure nAch. Smith (1966) studied the effect of arousal conditions on nAch. His results suggest that under some conditions nAch scores reflect extrinsic motivation (concerns other than achievement) instead of or in addition to "achievement motivation." A large number of studies have been conducted to show a relationship of nAch with personality factors such as E/I and N (Muthayya, 1968; De and Khan, 1969), with dominant interest (McClelland et al., 1953; Groesbeck, 1959), with intelligence (Minigone, 1968; McKeschie, 1968; Mehta, 1967) with academic success (Rosen, 1956; Shaw, 1961; Robinson, 1964; Muthayya, 1965; Bendig, 1958; Mitchel, 1961; Caron, 1963; Minigone, 1968; McKeschie et al., 1968; Muthayya and Rajeshwari, 1968).

During the past one decade several Indian studies of various motivational variables have been reported.
Gokulnathan (1970), De and Priya (1972), Jawa (1972)
sought to relate nAch with school achievement, anxiety
and risk-taking by using a sentence completion test (SCI)
prepared by Mukherjee (1969). Some other studies like
Bhatnagar (1966), Basumalik and Banerjee (1967) have
used Edward's Personal Preference Schedule (EPPS) and
tried to relate the results of sex, culture and risk
taking. Dahiwal (1971) used EPPS for assessing nAch
as a non-intellectual predictor of scholastic attainment.
Pandey and Singh (1971) worked on Bendig's achievement
scale to study the relationship of nAch with religious
beliefs and practices. Mohan, V. (1973) found a positive
and significant correlation between nAch (EPPS) and
educational achievement. In a subsequent study,
Mohan, V. (1979) found "Dominance (EPPS) to be positively
related to SPM scores. Several other studies have used
a semi-projective TAT type technique e.g. Siddiqui
(1970), Chaudhary (1971), Pandharipande (1972),
Gokulnathan and Mehta (1972), Mehta (1973).

Some studies have been conducted on nAch and social
and cultural stratification. Cross-cultural studies using
TAT adaptations of nAch under arousal conditions have
been carried out to tap nach in boys and girls Angelini (1955) in Brazil, Hayashi and Habu (1962) in Japan, Tedeschi (1962) in Persia.


Muthayya (1965) found predominant extrapunitive reactions for high and impunitive reactions to frustrations in low nach group. Obstacle dominance was found as a characteristic of high and ego-defense as a characteristic of low nach groups. Muthayya (1968) found introverts having slightly higher nach scores than extraverts. In the same year Muthayya and Rajeshwari found extraverts more achievement-oriented. The mean differences were, however, not significant in both the studies. Siddiqui and Akhtar (1969) found disciplined students higher on nach than the indisciplined. Mohta (1973) found student activists significantly higher on nach than the non-activists.

and found nAch greater in successful businessmen and progressive agriculturists compared to unsuccessful and traditional ones. Hundal (1971) found the fast progressing small scale entrepreneurs of Punjab higher on nAch than the slow progressing ones. Singh and Singh (1972) found business entrepreneurs possessing more risk taking capacity as compared to agricultural entrepreneurs.

Need for Affiliation

"nAff is a concern in an individual over establishing, maintaining, or restoring a positive affective relationship with another person. This relationship is most adequately described by the word friendship" (Heynes, Veroff, Atkinson, 1966). It is a drive to relate to people. The affiliative motive is generally assumed to be either a means to an end or an end in itself. Individuals may socialise simply because they enjoyed it regardless of whether anything but company was apparently gained thereby (Schater, 1959). The affiliative concern becomes apparent in the reaction of an individual to separation or some disruption of an interpersonal relationship. Affiliative concern is inferred from an expression by a person of his liking, or the desire to be liked or accepted or forgiven. It is expressed in the sorrow in parting, shame or grief over
some action that has led to separation, or similar instances implying the desire to restore to affiliative relationship of the past.

Very little research has emerged on the nAff in relation to performance. Mohan (1973) found a negative and significant correlation between nAff and educational attainment. Bowen (1973) reported that nAch, nAff and nPow were uncorrelated in a study on Indian businessmen and managerial personnel. Davis (1977) opined that individuals with high nAff work better when complimented for their favourable attitudes and cooperation; they select friends as their assistants. Dwivedi (1979) suggested that high nAff must be accompanied by high nAch in the leader. Maier (1976) points out that needs by themselves may produce restless behaviour. Jerath (1979) and Bhanot, A. (1980) found a negative relationship between nAff and nAch. Hardly any studies showing the relationship of nAff to crime are available.

Need for Power

According to Veroff, J. (1955) nPow is the concern of a person to control the means of influencing others.
nPow is expressed through a desire about wanting to win a point, about showing dominance, about gaining control (such as by a political or executive position), about convincing someone of something and about wanting to avoid weakness.

"nPow is related to the political means used to achieve economic aims, but the results of McClelland's study (1935) showed that nPow was not related to economic development" (Bhanot, 1980). According to McClelland and Teague (1975) high power motivation interferes with business success - probably because it results in too high risk taking. They also found that people with high nPow do not seem to take into account the probability of success. Persons high on nPow tend to be somewhat higher risk takers than others (Davis, 1977). Durand (1975) conducted a study on black businessmen and found that entrepreneurs who exhibited high levels of business activity were those who had high nAch and low nPow. Jerath (1979) found a positive correlation between nPow and nAch, (E-nAch) among the males. Bhanot, A. (1980) found nPow showing positive relationship with work efficiency in one of the groups of the technical personnel studied by her. The author has not come across any studies regarding nPow of criminals.
Need for Aggression

Aggression is a construct designed to explain a desire, intention or resolve to inflict injury to the external world, or a wish to destroy one's own self. Thus it expresses a person's hostility to the external world or towards himself. Overt aggression is inferred in fantasy measures through the following five general categories: (a) all occurrences of death, (b) physical violence—beatings, auto-accidents, combat etc., (c) personal tragedies and misfortunes — homes burning to the ground, loved ones ill, loss of life savings, etc., (d) crimes — theft, breaking and entering, embezzlement, etc., (e) quarrels — disagreements in which anger, hatred, resentment, tension, etc. are involved. Punishment or imprisonment for crimes committed is not considered as aggression (Atkinson, 1964).

"Aggression is the behaviour which ranges from mere disapproval, criticism and contempt to any kind of offence including assault and murder, the victim of which is the aggressor himself or some other character or object" (Kurzeshi Manual for AAPAS Motive Test, 1971).

Dollard et al. (1939) reported a study by Sellenceberger showing a marked relationship between aggressive behaviour and male hormone content.
McClelland (1951) cites evidence to show that in the presence of strong anxiety, aggressive tendencies appearing in fantasy are projected into impersonal, vague or unspecified agents e.g. animals, sickness, accident etc. Miller and Dollard (1939) formulated the "frustration-aggression" hypothesis which was subsequently reformulated as follows: "Frustration produces instigation to a number of different types of response, one of which is some type of aggression" (Miller et al., 1941). The extrapunitive individual, especially if of irascible temperament quickly resorts to aggression, though often with displacement to some object other than the true cause of frustration" (Vernon, M.D., p. 155). Long-term studies of children growing up into adult life showed that aggression was a more consistent and persisting tendency in males than in females (Kagan and Moss, 1962). Mehan (1973) found negative, though insignificant, correlation between nAgg (EPQR) and educational attainment.

**Need for Security**

n*sec is a construct designed to describe a desire to attain an atmosphere in which one would feel contented, satisfied and free from feelings of insecurity. It is reflected in fantasy through:
1) Expression of the feelings of satisfaction and contentment, of being at home in the world.

2) Expression of the feelings of safety, strength, courage and optimism.

3) Expression of the feelings of dissatisfaction, inadequacy to resist the pressure of life, and general incapability to adjust with the circumstances which tend to block security, combined with a desire to avoid all these either by escaping from the situation or by finding ways to improve the circumstances (Kureshi Manual for AAPAS Motive Test, 1971).

Wishing for money, seeking employment, expression of financial difficulties, worry about difficulties resulting from unemployment, ill health or mishap or a desire to be relieved from all these difficulties are considered to be indications of nSec.

Birney in a study on the effect of threat on thematic apperception (1950) found more imagery on nAff in subjects with aroused nSec. The self-report test of Security-Insecurity Inventory (Maslow, 1952) has contributed towards defining and explaining nSec though the inventory only studies the 'feelings' of security-insecurity and not nSec. As such Maslow (1954, 1965) has suggested that the fundamental needs are organised
in a hierarchy "at the bottom of which are the physiological needs, then safety, then love, then self-esteem and the esteem of others; and at the summit, self-actualization, the effort to realize the maximum fulfilment of all the potentialities and abilities, and especially the creative abilities" (Vernon, p. 116). The need for safety (security) is strongest in children, but it may also dominate the behaviour of adults who have not developed the normal adult degree of security.

Kureshi et al. (1981) in a study on the approach-avoidance aspects of needs and aff among highly secure and insecure adolescents found highly secure subjects having a stronger tendency to approach than the highly insecure subjects who have a stronger opposite tendency to avoidance components of the two needs.