CHAPTER I
INTRODUCTION
The noise in the environment in which one lives, works and relaxes has direct and immediate effect on psychological and physiological functioning. Noise is considered to be an unpleasant, disruptive, distracting, interfering with important activities and an agent which impairs efficiency.

Cohen and Weinstein (1981) defined noise as any sound that is unwanted by the listener because it is unpleasant, bothersome and interfering. It means that noise remains a noise to a certain extent by the ear of the beholder. It is a potent source of irritation and annoyance only to the listener. The general belief that noise may on occasions lead to wavering of attention and lapse in concentration is not quite true. A lapse or failure in concentration is always attributed to noise, but studies under controlled experimental conditions have shown that such lapses are just as frequent in noisy as in the quiet conditions.

Research on the effects of noise on performance is however questionable. The evidence regarding the adverse
effects of noise on efficiency are contradictory. Some claim noise to be harmful to efficiency and mankind, while there are other findings which claim beneficial effects. Apart from these two groups of findings, the third group claims no effect of noise on efficiency.

Some people can get adapted to continuous noisy environment easily, may no longer notice the continuous noise after sometimes and the conscious awareness regarding noise fades away with time. On the other hand some people find it difficult, if not impossible, to adapt to surrounding noise and get disturbed by it continuously.

Although all people are affected by noise, yet a particular noise stimulus does not cause the same degree of annoyance in each individual. A person who reports noise as being more annoying than another person might be more sensitive to it.

Different types of environmental noises like residential dwellings, offices, factories, traffic and in India-community activities such as fairs and festivals, entertainment programmes and even funeral ceremonies have a pervasive effect on an individual. One is not safe even in
one's house. The noises produced by hair dryers, food processors, vacuum cleaners, industrial equipment, jet aircraft, punching machines and pneumatic drills keep on producing continuous noises in factories, offices and other places. The concept of noise implies a significant psychological concept (unwanted) as well as physical. The physical component is perceived by the ear and higher brain and is psychologically evaluated by the listener as unwanted. Noise is unwanted and undesirable only when some one finds it in this way.

The word 'noise' is derived from the Latin word "nausea". Noise is psychological concept and is a sound that is unwanted only by the listener. It is unpleasant, bothersome, annoying, interfering to output and is physiologically harmful but different people have different threshold for responding towards the same noisy environment.

Anastasi (1964) has reported how the same noise differentially affects different people. From the large number of subjective reports collected by her, the following statements are representative of the diversity which exists in reacting to noise:
a) "I can study much better with the radio going full blast, commercials and all"

b) "I never turn the radio on myself when I want to work, but it does not bother me if my roommate turns it on. I just ignore it".

c) "I simply can't work in the library with people working around or whispering, it's impossible to concentrate".

d) "How can New Yorkers ever get any work done? Trucks rumbling past, sirens-screaming, buildings going up or coming upon, streets periodically torned up—you can't hear yourself think".

People have much in common but each person is unique in himself. McKennel (1971) reported that the extent to which people can adapt to is not clear because each person is unique in himself. So there are people who report high annoyance in condition of low noise (hypersensitive) and there are those who report little or no annoyance under conditions of high noise (unperturables).

It means that different persons respond towards same noise in a different manner. Seigel (1986) reported that the effect of noise depends upon nature of noise, type of task and noise sensitivity levels. Unperiodic noise is more disturbing
than continuous noise and complex tasks are more affected in noise than simple tasks. The performance is also affected by the noise sensitivity level of an individual.

Sensitivity means that when two persons are asked to give rating of the same sound, the person who rates the same sound higher on annoyance scale is assumed to be more sensitive to it. Sensitivity is thought to be an intermediate variable between noise exposure and the annoyance reaction. Noise sensitive people are identified as those who have extremely high annoyance responses.

Noise-sensitive and noise-insensitive people show broadly different patterns of reaction to same noise. At identical levels of exposure, the reactions of low and high noise sensitive are different. It is expected that the highly sensitive ones are continuously distressed and wish to move away or take action against the noise while the less sensitive persons adapt to it and each time pay less attention to it.

As with virtually everything, there are individual differences in responding towards noise. Jonah et al (1981) reported that even at very low levels there could be some individuals who are intensely annoyed by noise and although
this proportion increases with the level of noise, at the highest level of exposure, a few individuals will remain unperturbed. There seems to be marked individual differences in sensitivity to noise. The subjective noise sensitivity level determines to a great extent as to how an individual’s work efficiency would be affected by noise. There seems to be some individuals who get intensely annoyed by every type of noise, while there are others who don’t get annoyed by any type of noise.

Shipra et al (1991) on the basis of quantitative, qualitative and physiological energy expenditure inferred from the drop of fore-arm skin resistance reported that due to adaptation efficiency was not much affected even under high intensity noise in case of low noise sensitivity Ss, but adaptation was not effective and efficiency was adversely affected in case of high noise sensitivity subjects under both high as well as low intensity of noises.

The noises are though costlier in terms of energy expenditure yet it seems that one person may not notice the same noise that is driving the other person berserk. Mecklin (1969) has reported an actual incident from one of the suburb
of New-York city, which clearly shows how intolerable and annoying noise could be to some people. In Bronborough, one evening four boys were at play. They were shouting and racing in and out of an apartment building. Suddenly, from a second floor window, came the sound of a pistol, one of the boys sprawled dead on the pavement. The killer confessed to the police that he was a night worker who had lost control of himself because the noise from the boys prevented him from sleeping. This incident may be an extreme example of the impact of noise on humans, but it does highlight that people differ greatly in their reaction towards the same noise.

Noise sensitivity is an individual difference variable characteristic of the person and it varies among people. All the person are not adversely affected by noise. Different people can give different performance under the same noise. Some people prefer some sort of soft sound in work place and find it soothing, while others find it detrimental to performance and find it stressful.

Batra et al (1989) reported that there is a relationship between noise sensitivity and mental work. The Hindi adaptation of Weinstein’s noise sensitivity scale was
administered on a large population and a sample of 60 Ss-30 belonging to high noise sensitivity and 30 belonging to low noise sensitivity was drawn. The study was based on 'block randomised factorial design'. The mental output of Ss was calculated. The physiological energy expenditure was inferred from the drop in skin resistance of fore-arm ANOVA was applied to analyse data. Significant effects of noise and interactions between noise and noise sensitivity levels were obtained.

Noise is probably related to health problems more in people, who are more sensitive to it. According to Jewell (1986) people who are highly sensitive to noise may have receptors that are more sensitive to noise than others. There seems to be considerable individual differences in tolerance to noise both physiological and psychological.

Bryan and Tempest (1973) stated that irritability, headaches, depression and desire to escape from noise is there in highly sensitive people. It has been reported that some individuals complaint bitterly about noise while others can get easily adapted to noise. Effect of noise is different on work output and physiological functioning of the different individuals. Weinstein (1978) also reported individual
differences in the initial reaction to noise. Even quite small changes in environmental noise levels can have undesirable psychological consequences among a wide range of individuals.

Environmental noise confronts us at many corners of our life. Psychologists define noise as unwanted sound, unwanted because it is unpleasant to the listener. Anderson (1971) found that the annoyance caused by noise is bi-modal and this has usually been taken as evidence for the notion that the individuals fall into a "sensitive" and "insensitive" groups. Living organisms go by the principle of hedonism. The quietness or absence of noise may be presumed to be pleasant to some, but to some this may not be so and deprivation of noise may be disturbing. These people can easily get adapted to noisy environment and do not get disturbed by it. This shows that all individuals are not equally susceptible to the effects of same noise.

Anxiety

The environment contains regions of danger and insecurity, it can threaten as well as satisfy. The environment has the power to produce pain and increase tension as well as bring pleasure and reduce tension. It disturbs us.
The individuals customary reaction to external threats of pain and destruction with which it is not prepared to cope is to become afraid or get anxious.

Anxiety is a feeling of fear and apprehension, that may or may not be connected to a particular event or object and that is often accompanied by increased physiological arousal. The main symptom of anxiety include fear, apprehension, inattention, palpitations, dizziness, sweating and chest pains.

Anxiety is a common symptom found in all persons of modern age. Codeman (1981) says that anxiety is a generalized feeling of fear and apprehension. Few persons have a permanent anxiety and are called individuals with high anxiety level. The persons with high anxiety exhibit anxiety in every type of situation. The persons with low anxiety have anxiety only under some specific situation. The intensity of anxiety for low anxiety changes with time to time and with situation to situation.
Anxiety complex response involves conscious feelings of irregularities in heart, blood vessel, glands and muscle actions. Thoughts or feelings of being afraid may or may not be always present.

The characteristics of high anxiety is as follows - A conscious feeling of fear and anticipated danger, without the ability to identify immediate objective threats that could account for these feelings of apprehension. A pattern of physiological arousal and bodily distress that may include miscellaneous physical changes and complaints are there in a person with high anxiety. Cardiovascular symptoms - (heart palpitation, faintness, increased blood pressure, pulse changes) respiratory complaints (breathlessness, feeling of suffocation) and gastrointestinal symptoms (diarrhea, nausea and vomiting) are found in an individual of high anxiety. If the anxiety persists the prolonged physical reactions to it may have chronic effects on each of these bodily systems.

Different Psychologists define anxiety in different ways. Freudien's view of anxiety is as having an unconscious bias. Freud's analysis of anxiety states that it is a mean of alerting the individual that a dangerous situation exists
close at hand. Freud maintains that such situations occur when the ego is presented with a conflict that is not easily handled. These conflicts occur when the ego perceives the satisfaction of unconscious Id whiches would place the person in a perilous situation. As a result the person is in a state of fear and tension. By informing the individual of the existence of a dangerous situation, anxiety provides the person with an opportunity to eliminate or decrease the danger that is present. Freud places anxiety in one of three categories: reality, neurotic and moral. While reality anxiety involves a fear based upon legitimate danger, neurotic anxiety is based upon irrational fear and moral anxiety encompassing a fear of one's own conscience. According to Freud, when anxiety is severe it is usually dealt with unconscious through the use of defense mechanisms.

May (1950) described anxiety as apprehension caused by the threat to values which the individual holds essential to his or her existence the personality.

H.S. Sullivan (1968) described anxiety as an intensely unpleasant state of tension due to experiencing disapproval in
interpersonal relationships. Mowerer et al (1950) described anxiety as a learned response to a set of stimuli that warn us that an aversive event is soon to take place.

According to Rogers (1951) Anxiety is the outgrowth of a perceived threat to the self-concept. Individual sometimes apprehend the situation in a different manner. Some of them become uneasy very quickly in a given situation and some of them do not get disturbed easily.

Rotter (1954) is of the view that anxiety may be thought of as reflecting a discrepancy between needs and experiences. A strong need coupled with a low expectancy, that it will be satisfied, is the analogous of anxiety.

May (1977) described anxiety as a diffuse apprehension, the object of which is not apparent. Feelings of helplessness and uncertainty go along with it. Basically anxiety is a response to a perceived threat to the very essence of the personality.

According to Cattell (1966) anxiety is the sum total of our unfulfilled needs and the extent of our confidence in their being satisfied. Anxiety then, corresponds to our total
expectation of need satisfaction when individual feels that he is not achieving the set goal he becomes frustrated. People differ in their ability to retain normal reactions when they are unable to meet their goal directed activities. Some of them, who have high anxiety level may "go to pieces" and individuals with low anxiety level can "take it easily".

Intelligence:-

Intelligence is a composite of mental functions. It denotes an ability i.e. a condition or a complex of conditions for specific performance or achievements.

Intelligence may be defined as "flexibility" or "versatility" of adjustment. It is a function of living organisms in much the same sense that maneuverability and speed are functions of an airplane. One plane is more maneuverable than another because it has structures concerned with maneuverability which are superior to those of the other. The intelligence of living organism is likewise based upon their structures, but it also depends upon what happens to these during the years of life prior to maturity.

Intelligence is such a power or faculty which helps one in understanding, thinking and reasoning about a thing.
Therefore our learning and thinking are possible through intelligence only. Intelligence is an organization, comprising the abilities of readiness, correctness, with its help a person shows necessary mental control and action in solving problems.

In the field of psychology the word "Intelligence" finds a fairly comprehensive use but it has been defined in a number of ways by the scientists.

According to Binet "Intelligence is to judge well, to comprehend well, to reason well". Burt says "inborn, around, mental-efficiency, the power of re-adjustment to relatively novel situations", is Intelligence.

Wechsler (1944) says that Intelligence is the aggregate or global capacity of an individual to act purposefully, to think rationally and to deal effectively with his environment. It can be said that Wechsler has defined intelligence as it is the conglomeration of many powers.

William Stern (1914) defined it as the ability to adjust oneself to a new situation. The overall intelligence of a person is represented by his general flexibility of
adjustment. Spearman used this term to represent an alleged general ability or capacity, which expresses itself through special skills, like social, mathematical, mechanical and so forth. Sometimes they are related to the individual's ability to deal with abstractions.

Stoddard's definition is that Intelligence is the ability to undertake activities that are characterised by (1) Difficulty (2) Complexity (3) Abstraction (4) Economy (5) Adaptiveness to a goal (6) Social value and (7) The emergence of originals and to maintain such activities under conditions that demand a consideration of energy and resistance to emotional forces.

Intelligence in general sense is one's capacity to handle a situation more efficiently and adequately than others. It is composite of mental functions. Those who possess intelligence in greater quantity reported to learn quickly, adjust with the new environment in no time and even to reason and agree out well.

Hence it has been regarded as one of the key factors in getting success in life.
Strictly speaking all tests of intelligence are measures of performance. However, the term performance is customarily applied to tests which call for a minimal understanding and use of language.

In order to measure intelligence, there are different types of tests available. Several performance tests are available. Main types of tests are:

1. Verbal Individual intelligence tests.
2. Non-verbal individual Intelligence tests.
3. Verbal group Intelligence tests.
4. Non-verbal group Intelligence tests.

These major types of tests are used to see the flexibility especially exemplified in ready adjustment to new situations. Another quality of intelligence is to organise the acquired experience. Since all the persons are not of equal intelligence, therefore, individual differences are found in their organizing capacity. On the basis of this organizing capacity that a person is called of very superior intelligence or of superior or low intelligence.
Personality:

Personality is the mirror of one's total behaviour. It is in fact the integration of physical, intellectual, emotional, social and character makeup of the individual, which is expressed in terms of behaviour, experiences, aspirations, interests, habits, sentiments, values, beliefs, ambitions and temperaments.

Personality is in fact the organized system of behaviour, attitudes and values that characterize a given individual and account for his particular manner of functioning in the environment. Personality includes a public personality that can be observed by others and a private personality that consists of thoughts and experiences.

A person behaves in a given situation according to his personality. The individuals can be classified into different categories according to a particular behavioural or physical characteristic. Different psychologists define it differently.
Allport (1937) defined that Personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to his environment.

The term personality was probably derived from the name of the mask (persona) which actors once used to wear to indicate to audience whether they played the villain's or the hero's role in a drama. Personality, it means has a social frame of reference.

Guthrie (1944) defined personality as those habits and habit systems of social importance that are stable and resistant to change. On the basis of these views personality consists of sentiments, cognitive features, complexes, habits, interests and ideas.

No two persons can be said to have the same personality, every personality is unique. Personality is more than a mere summation of measurable aspects. It is an integration, a blend, a merger, and an organized whole. According to Cattell (1950), personality is that which permits a prediction of what a person will do in a given situation.
Guilford (1959) says that personality is a person's unique pattern of traits. Personality is the most characteristic integration of an individual's structure, modes of behaviour, interests, attitudes, capacities, abilities and aptitudes. McClelland defined "personality as the most adequate conceptualization of a person's behaviour in all its detail that a scientist can give at a moment in time".

Personality, the term used to represent this unique integration of measurable characteristics and motivational under-currents, is applied only to the relatively permanent or consistent aspects of a person. Personality is the characteristic integration of every aspect of the individual, some aspects give more weight to the total product than others do.

Personality is not a fixed entity that locks an individual for all time within a preprogrammed destiny, regardless of environment. Instead, it must be understood as a product of the dynamic interplay between internal and external factors.

Jung categorized the personality in two types: Introversion and Extraversion. He explained introvert as the
persons who remain more inclined to their internal ideas and experiences. They are self-centered and are not much interested in taking part in worldly affairs. In this way, introverts are more of thinker. They want to remain engaged in solving intellectual problems. Introverts are oriented towards self and are preoccupied with their own thoughts, reactions and moods. They are shy and anxious in new situations. They avoid social contacts and prefer to withdraw from people rather than approach them. They are lovers of solitude. Neither they come to any decision in haste nor do they act on it promptly. They are even tempered, shy and prefer to work alone at the time of some stressful situation. They do not like to mix up with other people. Most of their characteristics are stable and resistant to change.

On the contrary, extraverts are outgoing, social, like to meet and mix with others. They are adaptable and are indifferent to aversive surroundings. They show unusual ease among people, great friendliness, marked ability and willingness to introduce themselves to others. They tend to direct the personality outward rather inward toward the self. Extrovert tries to avoid boredom by seeking stimulation from other sources. An extrovert is comparatively, more successful
than an introvert in worldly affairs. He is less reluctant in his emotional display whatever comes to his mind he utters unhesitatingly. An extrovert does not get discouraged like the introvert in the face of failures. In general way introverts as compared to extraverts are more oriented towards internal stimuli - they are concerned with their own thoughts, reactions and moods. As a result they tend to be more likely to be exuberant sociable people who crave activity, like parties and excitement and are frequently impulsive.

There are behavioural differences between extraverts and introverts (Eysenck 1973). Not surprisingly introverts are often found the tender hearted persons and are sensitive type of people. Whereas extraverts are believed to be the tough minded persons. They can get adapted to aversive surroundings easily and do not get disturbed by it. They have the marked ability and willingness for adjustment.

With this background we may pass on to the next chapter dealing with the review of pertinent literature.