CHAPTER - II

A CONCEPTUAL FRAMEWORK

Present chapter deals with the conceptual framework of various variables taken in the present study e.g. academic achievement and cognitive styles so as to get the conceptual understanding of these variables before seeing the effect of teaching model and teaching strategies on these variables.

2.1 ACADEMIC ACHIEVEMENT

The primary concern and the most important goal of education is academic achievement of pupils despite many varied statements about the aims of education. Academic achievement is also considered to be the main area of educational research by the researchers. Stephens (1960) states, "Not that other aspects of educational objectives are to be ignored but the fact remains that academic achievement is the unique responsibility of all educational institutions established by the society to promote a wholesome scholastic development of the pupils.

In the words of Crow and Crow (1956), "Achievement means the extent to which a learner is profiting from instruction in a given area of learning. In other words, achievement is reflected by the extent to which skill or knowledge has been acquired by a person from the training imparted to him; it is the outcome of general and specific learning experience. Therefore, the special acknowledgement of a person's skill, the range and depth of his knowledge or his proficiency in designated area of learning or behaviour.
is indicative of the extent of his achievement.

In view of Good (1973), Biswas and Aggarwal (1971), there seems to be considerable similarities in as much as all of them place emphasis on knowledge attained or skills developed in the academic subjects usually designated by test scores. In other words, academic achievement refers to the degree or level of success or proficiency attained in some specific area concerning school or academic work.

Pressey, Robinson and Horrax (1959) define achievement as "the status or level of person's learning and his ability to apply what he has learned." According to them achievement would not only include acquisition of knowledge and skills but also attitudes and values as aspects of achievement. Achievement as manifested by the application of acquired skills and knowledge is a product of learning attitudes and interests since these factors would implicitly influence the extent of achievement. According to Travers and Robert (1964), the term refers to any desirable learning that occurs. It is obvious that whether a particular learning is referred to as an achievement or not, depends upon whether some body considers it desirable or not. Hence, any behaviour that is learned may come within a definition of achievement.

Good (1973) defines academic achievement as "knowledge attained or skill developed in the school subjects, usually designated by the test scores or by marks assigned by the teacher or both."
Two fundamental assumptions of psychology made it necessary to measure academic achievement. First, there are differences within the individual from time to time known as behaviour oscillation i.e. academic achievement of the same individual differs from time to time, from one class to another and from one educational level to another. Secondly, there are individual differences. Individuals of the same age group, of same grade, usually differ in their potential abilities and academic proficiency whether these are measured by standardized measure of achievement by teacher's grading or by marks obtained in tests and examinations.

2.2 SELF-CONCEPT

Contemporary theorizing about self-concept derives from James (1890). He considered ego the individual's sense of identity. In addition to this global concept, he felt that self-includes spiritual, material, and social aspects. Mental faculties and inclinations comprised the spiritual self. Material possessions constituted the material self. The esteem and regard that a person perceives others have for him formed the social self. He also gave the self a dynamic quality in terms of self-preservation and seeking.

After James's writings, a number of theories began to establish and elucidate their concepts of self. Although each of these theorists introduced his preferred jargon, all used the term "self" to have one of three meanings: (1) a dynamic
process; (ii) a system of awareness; and (iii) a interrelated process and awareness.

The first meaning incorporated the cognition process, such as perceiving, interpreting, thinking and remembering. The second denoted the objectified form of awareness an individual gives to his feelings, evaluating, and beliefs about himself. The third gave the body of awareness psychodynamic quality in terms of its effect upon what is perceived of how this perception is interpreted, and thus of human behaviour learning.

Allport (1961) like James (1890) articulated on the interrelatedness of the self as both object and process with a measure of clarity. He was specially cautious about the use of the term "self" in order to avoid the factotum or agent theories of pre-scientific psychology. Yet, his contributions to an operationally useful concept of a dynamic self have been considerable. Allport calls the ego, or self functions the proprietary functions of the personality. The self-concept comprises awareness of self and striving activity, it includes bodily sense, self-image, self-esteem, and identity as well as thinking and knowing. The idea of self-concept gives stability and consistency to evaluations, intentions, and attitudes. For Allport, the terms self and ego should be used as descriptive adjectives to indicate the proprietary functions of the personality.
Freud (1943) gives the ego a central place in his theory of personality structure. In counter distinction to James (1890) and Allport (1961), Freud (1943) pays little attention to the self-image. Rather, for him the ego is a functional agent or executive of the personality which makes rational choice and controls action in the healthy person. The ego decides what instincts to satisfy as well as in what manner to satisfy them. It prevents the discharge of tension until the demands of the moral arm of the personality and the natural impulses of the person. To the extent that the ego is able to keep harmony between the impulses and conscience, it is an effective agent.

Mead's (1934) self is as an object of awareness in contrast to Freud's (1943) conception of ego. Mead claims that the person responds to himself with certain feelings and attitudes as others respond to him. He becomes self-conscious (aware) by the way people react to him as an object. Further, various selves can be differentiated by the specific set of responses in different social settings. Home attitudes expressed toward him create a home self; school attitudes expressed by teachers and classroom experience create a school self; and social attitudes expressed by peers and others in social settings create a social self.

Lewin (1936) states, "the self-concept is expressed by a life space region which determines present belief about the self. The term "life space" is a psychological concept
to be distinguished from physical space. It includes the individual's universe of personal experience as a space in which he moves. Goals, evaluations, ideas, perceptions of significant objects, future plans and events, all form a part of the life space of the person. Life space can be considered a complex internal mechanism which produces behaviour. All the variables that determine the direction of behaviour lie in the life space of the individual. If one is to predict behaviour, one must know the life space of the person at the time the behaviour is to be predicted. By the same token, if one desires to change behaviour, one must alter the valences of the subject's life space. Lewin's (1936) life space closely parallels the meaning of an objectified form of self.

Distinction between a subjective-self and an objective-self was made by Lundholm (1940). No mention of the functional, motivational or process dynamics of the self is explicitly stated. The subjective self is mainly what a person comes to think about himself. Lundholm (1940) views the subjective self as alterable from the experiences one has in interaction with others in the pursuit of various tasks. This theory is similar to Mead's (1934) in that the self is primarily an object of awareness.

Sherif and Cantril (1947) assert that the self is an object and the ego is a process. They conceive of the ego as a constellation of attitudes that include personal identity,
values, possessions, and feelings of worth. Although they do not clearly differentiate self as object and ego as process, they do imply that when the ego becomes involved in a given task it will energize and direct the person’s behaviour. For instance, if self-esteem is at stake, the ego attitudes are aroused and tend to activate the person to work much harder.

Symonds (1951) incorporates the psychoanalytic theory of Freud and the social philosophy of Mead (1934) and thus sees the ego as a group of processes and the self as the manner in which the individual reacts to himself, while ego and self are distinct aspects of personality, there is considerable interaction between them. There is favourable self-reaction when the ego performs effectively in meeting the demands of life. On the other hand, the ego functions more effectively when the self is confident and held in high regard. Symonds (1951) cautions that a person may be unaware of his true self-conceptions due to unconscious distortions. In other words, what a person says about himself may not necessarily agree with his unconscious self-evaluation.

"The Self" the principal organizing influence exerted upon man which gives stability and order to human behaviour (Cattell, 1950). He differentiates between the concept of self (awareness) and sentiment of self. The sentiment of self regard is the most important influence in man. Cattell (1950)
states that sentiments are the "major acquired dynamic trait
structures which cause their possessors to pay attention to
certain objects, or class of objects, and to feel and react
in a certain way with regard to them". Here we have selective
perception as it relates to self-concept. Cattell (1950)
also introduces the process of self-observation. The self which
a person must rationally admit to be is the actual(real) self,
and the self which a person would aspire to is the ideal
self. Cattell (1950) along with James (1890), Allport
(1961) and Lewin (1936) conceive of the self as both object
and process. While James (1890) gives self a dynamic quality
of self-preservation and seeking and Allport (1961) gives
it the "propriete" functions of striving activity, Cattell
(1950) is even more explicit in terms of selective perceptin
and maintenance of self-esteem, and adds the dimension of
aspirational self.

Where Cattell (1950) expands the self functions,
Murphy (1947) expands objectified self, as does Mead (1934)
and delimits the self-process primarily to defensive-enhancing
functions. Murphy (1947) presents a number of selves
dynamically interconnected in the forms of a total organization.
He defines "self" as the individual as known to the individual.
This derives from a person's conception and perceptions of
his total being, including such selves as the frustrated
self and the ideal self. Murphy (1947) attributes the defensive
mechanisms to the ego processes. The major activities of
the ego are to defend and/or enhance the self-concept. Wolman (1950) defines self-concept as the individual's appraisal or evaluation of himself. Unlike Symonds (1951), who cautions that a person's unconscious self-evaluations may distort his self-concept, Rogers (1951) believes in the discontinuity of major significance in order to understand self-concept theory. People behave in terms of the ways in which they see themselves, a conscious activity. Rogers (1951) allows for the probability of an unconscious reservoir, but implies that only when information about self and the environment is "admissible to awareness" does influence behaviour. He states: "As long as the self-Gestalt is firmly organised, and no contradictory material is even dimly perceived, then positive self-feelings may exist, the self may be seen as worthy and acceptable, and conscious tension is minimal. Behaviour is consistent with the organized hypotheses and concepts of the self-structure. The consistency between behaviour and self-concepts indicates that dual role of self: self as object and self as process.

Chein's (1944) view of the 'self' and 'ego' appears to be in accord with the prevalent one that 'self' is what one is aware of, whereas 'ego' is a group of process. Self is not active. The motives and ideas of the ego serve the purpose of defending, extending, enhancing and preserving the self and threat to the self is sought to be countered by the ego.
He feels that self is thought to be a part of the total personality of an individual. The self follows a course of continuous growth and development and gets more and more complex and is involved with the emerging of individual into adulthood.

Hilgard (1949) thinks that behaviour is not a product of the self, but rather a complex of psychological processes aroused by proximal and distal stimuli of which a person is largely unaware. Like Chein (1944), he accords weightage to forces or factors outside the self.

Sarabin (1952) regards self as a cognitive structure, consisting of various aspects of an individual's being. One may have conception of his body (the somatic self), of his sense organs and musculature (the receptor or effect or self). Since all these are based on experience, consequently Sarabin (1952) speaks of them as 'empirical selves' using the term 'self' and 'ego' synonymously.

Shoebin (1962) defines self as "a relatively stable organisation of values that mediates and focusses behaviour", on account of which it exercises a profound influence on every day life. He argues, "In any case, self-involved behaviour seems close to impossible to explain the basis of a tension-reduction model, and the postulation of self-involvement seems necessary to account for the pursuit of long-range goals to
human motivation". Since hardly any mention of 'ego' is made by him, it should be presumed that the construes 'self' both as object and doer.

Combs (1952) is the clearest representative of the self-concept theory to which we subscribe, because of the central role they accord to conscious feelings, cognitions and perceptions. (Combs, 1952, "Phenomenologist"). He claims that "all behaviour", without exception, is completely determined by and pertinent to the phenomenal field of the behaving organism. That is, how a person behaves is the result of how he perceives the situation and himself at the moment of his action. In fact, phenomenology, then, is the study of direct awareness. Combs (1952) gives us a phenomenal self which is both an object and a process, thus avoiding arbitrary distinctions and semantic difficulties. Later, Combs (1952) succinctly states: "The self is composed of perceptions concerning the individual and this organisation of perceptions in turn has vital and important effects upon the behaviour of the individual.

According to Lebende and Green (1969), "Self-concept is the person's total appraisal of his appearance, background and origins, abilities and sources, attitudes and feelings which culminate as a directing force in behaviour".

In 'Dictionary of Education' by Good (1973), self-concept is defined as "the individual's perception of himself as a person, which includes his abilities, appearance, performance in his job and other phases of daily living." According to
to 'Dictionary of Education' by Taneja (1989), "self concept refers to the picture or image a person has of himself".

So, an individual's self-conception is his view of himself. It is derived from taking the role of others in social interaction. Self-conception is equivalent to the self if the latter is defined as the individual as perceived by that individual in a socially determined frame of reference. A self-conception consists, in addition to a view of identity; of notions of one's interests and ever since (i.e. his attitudes towards objects, cognitively, effectively and evaluatively; a conception of one's goals and his successes in achieving them; a picture, sometimes quite sketchy, of the ideological ('world view') frame of reference through which he views himself and other objects and some kind of evaluation.

Self-concept is organised in the sense that the individual perceives himself as a unit, and the qualities that he attributes to himself are fitted together into a meaningful whole. These qualities take the form of both evaluative attributes, which are usually described by the use of adjectives (handsome, ambitious, and the like), and role or position labels, usually expressed by nouns (Child, doctor, and so on).

**DIMENSIONS OF SELF:**

(1) The Basic Self-concept: This is the individual's perception of his abilities and his status. This is the perception of the roles to be played in the outside world. This is the individual's concept of the kind of person he
thinks he is. This concept is influenced by his physical self, his personal appearance, dress, and grooming; by his abilities and disposition, his values, beliefs and aspirations.

The rapid changes that take place during adolescence in height, weight, body build, facial appearance, and voice bring about changes in the adolescent's body image. Such matters as not having clothes like the other youngsters and not having a home where one can entertain friends without feeling embarrassed decrease one's conception of his own importance. They bring on feelings of social incompetence. They make more difficult the problem of appraising true ability and worth.

The self concept is enhanced when there is intellectual ability to meet problems. The slow reader, for example, may find difficulty in learning, thus causing negative self-concepts to operate in learning situations. Even for the person with intellectual abilities and good learning habits, the self-concept still has its ups and downs.

(2) The Transitory Perception of Self: The individual's self-image may at one time be compulsive, compensatory, and unrealistic and at other time insightful and practical. The self-perception which the individual holds at any given point in time may be determined by some "inner-directed" mood or by some "other directed" influence. Many individuals
do not recognize their transitory nature. They are optimistic or pessimistic, elated or depressed, satisfied or dissatisfied, in all or none sort of way. They are sometimes able to switch rapidly from one extreme to the other. Since there is some tendency for the individual to reflect more on his problems than on his accomplishments, the transitory perception of self is largely negative.

(3) The Social Self: "To see yourself as others see you" may or may not be valid. At one time, when in an optimistic mood, the adolescent perceives that other people see him in good light. When depressed, he perceives that others depreciate him. When others think him stupid, or socially inept, there is a tendency for him to amplify his feelings of insecurity; "How could any one like me?" More positive views on the part of others may enhance his perception of his social self.

(4) The Ideal Self: The concept of the ideal self, the kind of person the adolescent hopes to be, involves relating levels of aspiration to levels of ability. It also involves opportunities for self-realisation.

When the ideal self is set at an unrealistic level, frustration is increased. When it is set below one's level of ability, motivation may become lacking. The adolescent's level of aspiration tends to go up with success and down with failure. This up-down movement is more exaggerated than that
usually found in adults. The ideal self of the adult has evolved slowly through experience. Lacking such experience, the adolescent, depends a great deal on identification with someone else as the ideal - an elder brother or sister, a parent, or a teacher. This ideal person may stimulate either emulation or resentment, sometimes both.

**MEASUREMENT OF SELF-CONCEPT:**

Although it is true that we cannot see and measure the self-concept, we can observe behaviour. In this instance, and when dealing with all psychological constructs, one infers the nature of the self-concept from observable behaviour over a period of time. The behaviour is known to be symptomatic of the problem; therefore, if a person continues to behave in a particular manner, we may infer a linking mechanism from his behaviour. The relative status of a person's self-concept is usually determined through the use of one or more of the following techniques:

- Introspective self-reflections in personal family, social and school or work setting.

- Consequence between descriptions of current self-concept and ideal self-concept.

- Congruence between subjective self-report and action and the objective reports of clinically trained observers.
Non-introspective inferences derived from projective techniques and clinical interviews.

Measurement of self-concept is an arduous task for an observer. Each person can have a true picture of his own self, while its measurement by another can only be done by way of interference. Also a person may hold certain non-existing notions of himself or some unconscious attitudes of self which are not in conformity with his conscious opinion of himself. Furthermore, a person being conscious of another's assessing him, may not project his true self.

Tools for the measurement of self-concept are mainly of two types:

(i) Adjective Check List: Sarabin (1992) formulated a list of self-defining adjectives. To him it was better than the questionnaire method. Taking most of the words from Gough's List (284 adjectives) and some from Allport's List, he prepared a personality word list of 200 adjectives which he used for studying males and females, and neurotics and non-neurotics.

(ii) Adjective Rating Scale: A modification of Adjective Check List by Bills (1953) and Bills, Vance and McLean for finding out the sum of self-concept, was a Rating Scale of 49 traits.

(iii) Self-concept Scale: Ahluwalia (1986) standardized Children Self-concept Scale which contains 80 statements. The
subject has to give his response in 'yes' or 'no'.

(iv) Self-concept questionnaire: Saraswat (1992) standardized
Self-concept Questionnaire to measure the self-concept of adolescent and adults

2.3 ADJUSTMENT:

The simple meaning of adjustment is that those individuals whose behaviour pattern is in terms of social customs and manners are considered normal, while individuals who are unable to adjust according to social situations, are considered maladjusted. It may be pointed out here that certain definitions of adjustment emphasize the efforts made by the individual to deal with environmental stress and meet his need. These efforts are termed as adjusted behaviour.

In view of Coleman (1969) adjustment is the "outcome of individual's efforts to deal with stress and meet his needs". In this context Coleman defines adjustive behaviour also. According to him, adjustive behaviour is that behaviour, "by which the individual attempts to deal with stress and meet his needs; also efforts to maintain harmonious relationship with the environment". According to Smith (1961), "a good adjustment is one which is both realistic and satisfying. At least in the long run it reduces to a minimum, the frustrations, the tensions and anxieties which a person must endure." Smith further observes that adjustment "provides an evenness of satisfaction, a general satisfaction of the whole person,"
rather than a satisfaction of one intense drive at the expense of others". Smith considers evenness of satisfaction as the main quality of adjustment.

According to Shaffer and Shoben (1956), normal behaviour is integrative. They mention two types of behaviour patterns: integrative and non-integrative. They also make mention of adjustive and non-adjustive behaviour. Keeping these terms in view, Shaffer and Shoben write, "In defining Integration adjustment, the reciprocal influence between a person and his social group must be emphasised. A person must do his adjusting in a society composed of other people who have their own personalities, motives, conflicts and mechanisms of behaviour". Clarifying the nature of adjustive and integrative behaviour, Shaffer and Shoben write, "The drive-instigated behaviours are adjustive in that they reduce tensions; they are also integrative because they facilitate further satisfactions and accomplishments." Thus, it is quite clear that the same behaviour pattern could be adjustive and integrative on account of the purposes they fulfil. As regards non-integrative and non-adjustive behaviour, it has been stated by Shaffer and Shoben that maladjusted or inadequate behaviour was non-integrative. Further non-integrative behaviour is marked by "unevenness of satisfaction". An individual indicates non-adjustive reactions when he has no means of tension reduction, remains stirred up in a continuing, restless, unresolved state of anxiety, and is effected by a strong conflict.
Psychologists have interpreted adjustment from two important points of view. One, adjustment as an achievement and another, adjustment as a process. The first point of view emphasized the quality or efficiency of adjustment and the second lays emphasis on the process by which an individual adjusts in his external environment.

Adjustment as an achievement means how efficiently an individual can perform his duties in different circumstances. Business, military, education and other social activities need efficient and well-adjusted men for the progress of the nation. To interpret adjustment as achievement, a criteria have been set to judge the quality of adjustment.

Four criteria have been evolved by psychologists to judge the adequacy of adjustment. They are as follows:

(i) **Physical Health**: The individual should be free from physical ailments, like, headache, ulcers, indigestion and impairment of appetite. These symptoms in individual have sometimes psychological origin and may impair his physical efficiency.

(ii) **Psychological Comfort**: One of the most important facts of adjustment is that individual has no psychological disease, as obsession, compulsion, anxiety and depression etc. These psychological diseases, if occur, excessively cause to seek professional advice.

(iii) **Work Efficiency**: The person who makes capacities, may be
(iv) Social Acceptance: Everybody wants to be socially accepted by other persons. If a person obeys social norms, beliefs, and set of values, he may be called as well adjusted, but if he satisfies his needs by antisocial means, then he is called maladjusted. But societies differ in deciding the universally acceptable criteria of good behaviour e.g., smoking and drinking are supposed to be antisocial, but there are societies, where these activities are quite normal for social adjustment.

Adjustment as a process is of major importance for psychologists, teachers, and parents. The nature of the adjustment process is decided by a number of factors, particularly internal needs and external demands of the child. When a conflict occurs between internal needs and external demands, in such conditions, there are three alternatives, one the individual may inhibit or modify his internal need of demand and second, he can alter the environment, and can satisfy his demands, and third alternative, is that he can use some mental mechanism to escape from the conflicting situation and may be able to maintain the balance of his personality.

Piaget (1952) has studied the adjustment process from different angles. He used the terms accommodation and assimilations to represent the alternation of oneself or environment as a means of adjustment. A person who carries his values and standard of conduct without any change and maintain
these in spite of major changes in the social climate, is called the assimilator. The man who takes his standard from social context and changes his beliefs in accordance with the altered value of the society, is called accommodator.

Now the question arises, which of the above referred processes of adjustment is more effective? It is very difficult to answer this question in clear cut terms because relative merits of either of the adjustive process requires making value judgment. The human beings have to resort to both the devices in order to adjust successfully in his society.

There is a constant conflict between the instinctive urges and environmental conventional restrictions and social pressure in the mind of the individual (as per Freud's theory, cited by Chauhan, 1973). If a person is strong and his consciousness sides with his intrinsic desires, he satisfies them irrespective of violation of social norms. Such a person defines the norms of the society for his pleasure. But most of the persons do not violate the social norms because of their training and education in childhood. They accept the social taboos and inhibitions imposed by the community. They fight with their own wishes, repress and suppress all those that are socially reprehensible. It is this unresolved conflict between their inner impulses and taboos of the society that give rise to maladjusted, manifested in a wide range of behavioural actions.
Neurosis is caused by the constant interaction of three forces: (i) The powerful unconscious instinctive impulse (ii) the ego and (iii) the super ego. The powerful instinctive desire when after emerging from the unconscious is blocked by ego and superego, further causes the conflict. This conflict leads to subterfuges by which the urge seeks satisfaction. The neurosis is the outward manifestation of this conflict and can be understood by interpreting these forces correctly.

While Freud attaches importance to the principle of hedonism and the sex impulses Adler (cited by Chauhan) advocating quite a different approach to understand human behaviour. He observes that people can sacrifice their sex gratification in order to attain the goal, they set for themselves. Adler gives the feeling of inferiority as the primary cause of stress. The child struggles hard to overcome the feeling of inferiority in an attempt to master his environment. The neurotic solution to this feeling of inferiority and helplessness is to strive for personal power of superiority. All persons are striving for attaining superiority in different fields using a variety of approaches. The desire to dominate is the choice of profession, vocation, friends etc. Adler concludes that the desire for superiority is the universally acceptable goal of human behaviour and neurosis is device to dominate in various walks of life.

The determinants of adjustment can be classified into biological and cultural. The biological determinants of
adjustment have their roots in the heredity of the individual. The cultural determinants of adjustment are important because they permit the individual to adjust within the framework of cultural norms, values and standards of behaviour. Following may be some of the cultural determinants of adjustment of drug addict and non-addict adolescents: (i) Family Structure, (ii) Education in the schools, (iii) Social organisations, (iv) Sub cultural loyalties, (v) Economic conditions (vi) Caste, class, racial, and religious harmony, (vii) Parents' attitude towards their children, (viii) Values and ideals accepted in the family.

In the present study, adjustment has been operationally defined as persons' overt behaviour, their feelings about themselves about others and environment and the ways, they react to external stimulus and scores obtained on Mittal's Adjustment Inventory (1976) is the measure of adjustment.

2.4 COGNITIVE STYLES:

The things we do in our heads - mental activities or thinking are referred as cognitive processes. Mahoney (1937) stated, "There are numerous indications that psychology is undergoing some sort of revolution in the sense that cognitive processes have become a popular topic. The trend towards the interest in this area, that is, cognition can be well understood because of the attention paid to cognitive styles
in publications as those of Kogan (1971), Landfield (1977), Messick and Messick and associates (1976). In essence, cognitive style refers to the way in which individuals organise their experiences.

Cognition:

According to the Dictionary of Psychology (Drever, 1952), there are several meanings of cognition like knowing, judging, perceiving, conceiving, remembering, imagining and reasoning etc. Cognition is considered as the part of conscious perceiving, learning and thinking by many psychologists. Every individual organises all in the different manner what he sees, remembers and thinks about. According to Kagan and Kogan (1971), "Cognition is the organization of a stimulus configuration in order to arrive at a basis of similarity among a group of stimuli, and the assignment of a symbolic label to the organised pattern of similar stimuli."

Wann (1962) states that conceptual response is elicited by a process of seeing relationships, categorizing, discriminating and generalizing about those things which the child sees, hears and feels in his environment.

For theoretical approach to cognition, there are various theories:

(1) The Stimulus and Response Theory: It was one of the earliest approaches stemmed from the behaviourist tradition (Watson, 1930).
Rather than discussing cognition or thinking in terms of mental processes (which are not accessible to direct study), behaviourists emphasized the basic concepts of stimulus and response. According to this approach knowledge and skills are the results, that is, whenever a stimulus occurs; it provides the response with which it is associated.

(ii) **The Motor Theory:** It was the one version of stimulus response theory in which all behaviour was equated with the muscular or glandular activity. Most human thought was considered to involve subvocal activity; that is, thinking was viewed as talking to oneself. Muscular activity could be an incidental by product of thinking, or an overflow resulting from activities in brain that occur during thinking. The brain being so active during thinking that signals 'spill over' to the muscles through the motor pathways. Images and procedural knowledge types of cognitive activities are very difficult, if not impossible, to verbalise and to incorporate into a motor theory. Finally, learning and thinking occur even when the body has been paralyzed by a drug, preventing any recordable muscular activity. Thus, motor theory cannot account for many things, we know about cognition.

(iii) **Mediational Theory:** It was proposed by Maltzman (1955) as an alternative to motor theory. This theory suggests that important stimuli and responses could occur in the head without motor components. Mediational events or thoughts provide a connecting link between the environment and the way one responds...
to it. Messick (1976) defines in terms of consistent individual differences and maintains that cognitive structures mediate between environmental input and the organism's output. He adds that cognitive structures organise behaviour as well as input.

(iv) **Gestalt Theory**: It originated in Germany after the turn of the century by Gestalt Psychologists like Kohler (1947) and Lewin (1951) and was contemporary with behaviourism in U.S.A. Gestalt psychologists were concerned primarily with perception, but applied Gestalt theory to nearly all significant psychological problems. For them, thinking and problem solving are matters of 'seeing' in the right way. Thus, their concerns about the perceptual processes strongly influenced their idea of cognitive styles as those dimensions that characterize a person's manner of perceiving, thinking and problem solving.

(v) **Hypothesis Theory**: It views the organism as an active thinker. Various psychologists (Bruner, Goodnow and Austin, 1956) are associated with this theory. In learning a task or solving a problem, the individual is seen as forming and testing hypothesis or ideas about what is happening and how to respond. Hypothesis theory suggests that we perform complex tasks such as problem solving by thinking out in advance various possible courses of action. We test these hypotheses systematically until the correct one is found.

(vi) **Information Processing Theory**: It framed as under the early influence of behaviourism, such mental concepts as memory
and reasoning were considered unscientific and not proper fields for psychological study. Bieri (1971) noted that a process of information, transformation is a basic assumption of the cognitive theorist. He told that individuals learn "strategies" programmes of other transformation operations to translate objective stimuli into meaningful dimensions. These strategies were termed as "cognitive structure" by Bieri (1971).

**Cognitive Styles:**

Leff, Garden and Ferguson (1974) defined cognitive style as an in-built plan or programme to select specific type data for processing or to perform specific mental operations on informations processed.

Cognitive style denote consistencies in the individual modes of functioning in a variety of behavioural situations. Coop and Sigel (1973) seem to equate cognitive style with behaviour rather than mediating process. This definition is similar to the earlier use of the term style by Allport (1937), to explain (describe) consistencies in behaviour; and the earlier concept of silent organisation, used by Gestalists to describe cognitive structures that are not tied to specific content, but rather than guide behaviour (Scherrer, 1954). The concept of schemate was utilised by Tolman (1926), who used related construct. The concepts of differentiation and hierarchical organization by Lewin (1935) are also important.
Cognitive styles is the way an individual filters and processes stimuli so that the environment takes on psychological meaning and it is representative of the mediation (Harvey, 1963). As such cognitive representations modify the one to one relationship between stimulus and response. If it were not for those cognitive representations, stimuli would be irrelevant for the individual or the individual would respond to stimulation in a robot like fashion. Schilling (1981) conceptualizes cognitive styles as the characteristic preference that individuals have for different types of information. It refers to the modes an individual employs in perceiving, organizing and labelling various dimensions of the environment.

Cognitive styles may entail generalized habits of information processing, to be sure, but they develop in congenial ways around underlying personality trends and are thus intimately interwoven with objective, temperamental motivational structures as a part of the whole personality thereby providing one aspect of matrix.

Common to all theory and research on cognitive style is an emphasis on the structure rather than the content of thought (Suedfeld, 1973). These structures refer to how cognition is organised; content refer to what knowledge is available. In the first month of life, individual behaviour style can be delineated (Birch et al. 1962). In terms of activity level, threshold of responsiveness, rhythmicity of
functioning, adaptability, intensity, approach withdrawal, mood, and persistence.

Bowerman and Lazarus (1958) have suggested that the cognitive style manifest itself in two ways, as a directive influence on behaviour or as an ability to resist disruption under interference conditions. The cognitive style may be 'perceptual-motor' dominant or 'conceptual' dominant. Although cognitive styles are viewed as habitual modes of information processing, they are not simple habits in the technical sense of learning theory because they are not directly responsive to the principles of acquisition and extinction. Cognitive styles develop slowly and do not appear to be easily modified by specific tuition or training (Kagan and Kogan, 1971; and Kogan, 1971). Across diverse spheres of behaviour, the stability and pervasiveness of cognitive styles suggest deeper roots in personality structure than might at first glance, be implied the concept of characteristics modes of cognition, as it were, that determines the nature or form of adaptive traits, defensive mechanisms (Shapiro 1965). In this view, a core personality structure is manifested in the various levels and domains of psychological functioning - intellectual, effective, motivational, defensive - and its manifestation in cognition is cognitive style. Thus Adorno et al. (1950) have investigated the authoritarian personality. Gardner and his colleagues (Gardner, Holtzman, Klein, Linton and Spence, 1959; Gardner, Jackson and Messick, 1960) have explored the patterning of "cognitive controls
which help the individual organise and mediate his transactions with the environment."

**Types of Cognitive Styles**:

Rokeach and his co-workers (1960) have concentrated research attention upon the behavioural correlates of individual with 'dogmatic' (close-mindedness) and non-dogmatic (open-mindedness cognitive style. Messick (1976) lists 19 such traits in his recent review of reported cognitive style variables. Some of the important cognitive styles are (i) equivalence range, which is operationally related to sorting or classifying tasks. (ii) Levelling Vs. sharpening concerns reliable individual variations in memory. (iii) Focussing Vs. Scanning, which shows individual differences in the variations in vividness of experience and the span awareness. (iv) Conceptual styles concerned with categorizing behaviour. The style of conceptualisation also has something to do with classification. The person who named as "Conceptual discrimination" is said to prefer sharpened classes, but also on the whole to show preference for relation. Where there are options, with the alternative label of integrative complexity, a style of conceptual integration involves seeing how categories or dimensions of information are related in multiple and different ways. (v) Cognitive complexity Vs. Simplicity is the multi-dimensional and discriminating way. (vi) Reflection Vs. impulsivity involves individual consistencies in the speed and adequacy with regard to hypothesis formulation and information processing.
(vii) Convergent vs. divergent represents the degree of an individual's relative reliance upon convergent thinking as contrast to divergent thinking. (viii) Risk taking represents one's willingness to take chances and to venture responses. (ix) Constructed vs. flexible control is susceptibility to distraction and cognitive interference. (x) Strong vs. weak automization refers to an individual's relative ability to perform simple repetitive tasks compared to his general level of ability. (xi) Conceptual vs. perceptual motor dominance is with reference to novel or difficult tasks. (xii) Of all the cognitive styles, by far the most investigated has been Witkin's field independence Vs. field dependence.

Field Dependent and Field Independent Cognitive Style:

A great focus has been paid to the area of field dependent and field independent approach of cognitive style. The rationale for such focus follows from the accumulation of works surrounding the concept. Vernon (1973) writes, "it is likely that more empirical work has been carried out on field dependence - independence by his colleagues (1954,1962), and other psychologists, than on all the other cognitive styles put together."

The first and the foremost is the theoretical framework of psychological differentiation under the aegis of which the concept is evolved and developed. Moreover, this approach to cognitive style is not content-loaded, its structural
properties extend it to broader areas of human behaviour and subsets of human population.

Field-independence versus field dependence refers to a consistent mode of approaching the environment in analytical terms. The concept of field dependent and field independent cognitive style has undergone several historical developments. The interplay of empirical work and theoretical formulation has changed its conceptual nature. In its recent version, field independence and field dependence are bipolar concepts, and field independence refers to the extent of autonomy of external reference.

Originally, the concept of field independence was derived from the laboratory studies of perceiving the upright (Witkin, Lewis, Hertzman, Machover, Meissner and Wapner, from 1954 to 1972). The consistent manner of establishing the upright contributed to the notion of field-dependence and field-independence as individual difference constructs. Field-dependent people are regarded as the individuals inclined to use the field. Whereas field-independent people were considered as individuals tending to use body for perception of the right. The concept was now formulated as an "articulated field approach" at one end, and a "global approach" at the other end.

Witkin and his associates (Witkin et al., 1964, 1962) have done systematic research in their studies of
individuals having both the field dependent and the field independent cognitive style. He demonstrated that perceptual performance of an individual is related to highly diverse areas of cognitive life in a consistent manner. Differentiation at work was proposed by Witkin and others (1962). But this idea was borrowed from the work of Werner (1957), who stated that development involves an increased indifferentiation and hierarchical integration. Primitive or early behaviour is described as the global and diffuse type which is lacking articulation between the different areas of activity. But as the development proceeds to higher levels, functions become differentiated and the parts become discernible from the amorphous whole. These become the articulated units. Then Werner (1957) described that the direction of development was found in every psychological phenomenon; perceiving, thinking, learning, feeling and language behaviour. Similarly, this principle was applied in area of cognition by Witkin (1962) to the hypothesis that field independent persons have achieved a higher level of differentiation than field dependent persons, as identified by RFT (Rod Frame Test) and EFT (Embedded Figure Test), the performance of these tests, RFT and EFT requires differentiation of behaviour. So, it is necessary that individual must learn and perceive his environment in discrete manner in order to separate the part from the whole configuration or the one item from the configuration. The field independent
person is able to break the field and can attend to the various relevant form and items existing in the field along withdrawing his attention from the irrelevant form. Whereas, the field dependent or relatively undifferentiated person is not able to withhold his attention from the titles, or from surrounding the rod and the complex design containing simple figures in it.

Field independent person or the analytical individuals can be able to perform the tasks which require differentiation, in identifying the presence of logical errors and in understanding the various jokes and puzzles more quickly. But, on the other hand the field dependent individuals also called global type of individuals tend to identify a group exhibiting social orientation and they are more afraid of external influence and are markedly affected by the isolation from other people (Witkin, Dyk, Paterson, Goodenough and Karp, 1962; Witkin, Oltman and others, 1971). The persons who are field dependent, they differ largely from the field independent individuals in important personal characteristics. In case of attitude formation, field dependent persons are especially prone to be guided by the positions attributed to an authority figure or peer group (Deever, 1963). The field independent persons are quite less attentive to human content of environment (Konstadt and Forman, 1965). The field independent persons literally spend less time in looking at the faces of those with whom they are interacting as compared to the field dependent persons. The fact is, of course, a major source of information about what others are feeling and thinking. The field dependent persons also tend to
be better at remembering faces (Crutchfield, Woodworth and Albrecht, 1958). They also reflect superiority over field independent persons in attending to verbal messages that are more social in content (Engle, Fitzgibbon and Goldberger, 1966).

Family experiences of children who turn out to be relatively field dependent or field independent was demonstrated that the kind of relationship between the growing child and his mother is influential in determining the cognitive styles of the children (Witkin and others, 1962). Field dependent or the field independent plays an identifiable role in selection of electives and especially in the vocational preferences. More field independent studies favour those activities in which analytical skills are called for, whereas field dependent students avoid such domains. Field independent people are likely to learn more than the field dependent people under conditions of intrinsic motivation.

Various characteristics of the articulated and global cognitive styles can be summed up as: (i) The cognitive styles are concerned with the form rather than the content of cognitive activity. These are based on the individual differences in how one perceives, thinks, solves problems, learns, relates to others. (ii) Cognitive styles are pervasive dimensions. They cut scores the boundaries traditionally and help to restore the human psyche to its proper status.
(iii) Cognitive styles are stable over time. This does not mean that they are unchangeable. (iv) Cognitive styles are bipolar with regard to value judgement.

For the purpose of present study field independent and field dependent cognitive styles have been taken up as defined by Witkin et al. (1971) which refers to a consistent mode of approaching the environment in analytical terms. According to Witkin et al. (1971) field dependent people are regarded as the individuals inclined to use the field whereas field independent people are considered as individual tending to use body for perception of the upright. Its measurements are the scores on the Group Embedded Figures Test (Witkin et al. 1971).