CHAPTER - TWO
THEORETICAL VIEWS ABOUT PREDICTORS
CHAPTER - TWO

THEORETICAL VIEWS ABOUT PREDICTORS

In order to know the rationale of the present study and the conceptual understanding of the various predictors under study, the theoretical views about the predictors are discussed in the following paragraphs:

2.1 CREATIVITY:

Due to the tendency to emphasize interests by a wider area of disciplines to investigate the creative process and due to the complex nature of the creative experience there is no single accepted definition of creativity (Hallman, 1963). The first view of the tendency to assign different meanings to creativity has been reported by Vinacke (1960), Ghiselin (1963), and Yamamoto (1964). The second view, regarding the complexity of creativity experience; it is manifested by numerous definitions which Rhodes (1961) condensed into four roughly discriminating categories: person, process, press and product. Kneller (1965) observed that (a) creativity through the approach of person may be considered in terms of physiology, temperament, personal attitudes, habits and values of the person who creates, (b) explaining it by way of mental processes involving motivation, perception, learning, thinking and communicating the way, act of creativity calls into play, (c) press implies
understanding of creativity by focussing attention on environmental and cultural influences, and (d) products of creativity include elements such as theories, inventions, painting, carvings, poems and the like.

There are numerous references in the research literature which are in support of one or the other category mentioned above. A detailed description of these has been systematically organized by Gakhar (1975).

Personalogical approach considers creativity as related to unique cognitive factors (Guilford, 1950, 1964; DeHann and Havighurst, 1961) and also dependent upon certain non-cognitive factors (Barron, 1955; Hammer, 1961; Getzels and Jackson, 1962; Cropley, 1966; Raina, 1970; Cronbach, 1968; Gakhar, 1973, 1975; Gupta, 1979).

Creativity as a process has been considered by Spearman (1930), Kubie (1953), Bartlet (1958), Vinacke (1960), Ghiselin (1963), Hedmick (1967), Yamamoto (1964), Torrance (1965), Rogers (1976), Kant (1976), Brown (1977) and Gordon (1982). Wallas (1926) suggests that the creative process can be divided into four stages: preparation, incubation, illumination and verification. According to Taylor (1958), the Wallas steps towards creative accomplishment are valid, but it is also necessary to recognise the hierarchical levels
of creativity which from the lowest to the highest are: expressive creativity, technical creativity, inventive creativity, innovative creativity and emergentive creativity. Mansfield and Busse's (1981) Model of creative process in scientific fields involves five steps: (a) selection of the problem that is important and potentially soluble, (b) extended effort to solve the problem, (c) setting constrains to the solution of the problem, (d) changing the constraints through a restructuring process, and (e) verification and elaboration of results.

According to Torrance (1962) creative process consists of identifying problems, developing hypotheses as to the causes of the problems, finding out new solutions, application of those solutions which involve improvement of product and usual uses and finally communicating the results. According to him verbal creativity can be measured in terms of fluency, flexibility and originality.

There is an element of uniqueness or novelty in creative products. In some definitions of creativity (Stein, 1953; Rogers, 1962), novelty has been viewed in tangible products, but certain others (Stewart, 1950, Guilford, 1964) hold that it can also be present in the intangible products. Thurstone (1952) too argues that it does not make any difference whether the society regards an idea as novel or not.

It is not always possible to include a particular definition within one particular category inspite of the above broadly different categories of definitions. This is mainly on account of overlapping of one category of definitions with the other. Further creative process without having reference to person, press and product is equally ambiguous. Torrance (1965), while accepting the 'process' definition of creativity, has rightly raised the question: what kind of person one must be in order to engage most successfully in the process and what kind of product results from the process? Thus at least five components of creativity have been stressed - the act, the object, the process, the person and the environment. Hallman (1963) explains these elements of creativity when he writes: (a) it is a whole act, a unitary
instance of behaviour; (b) it terminates in the production of objects or forms of living, which are distinctive; (c) it evolves out of certain mental process; (d) it covaries with specific personality transformation; and (e) it occurs within a particular kind of environment.

Mansfield and Busse (1981) review of major theories gives the description of creative process. Psychoanalytic theories of Kris (1952) and Kubie (1958) emphasize the importance of pre-conscious processes. These processes are believed to occur when the ego, with its emphasis on logical, rational thought, temporarily loosens its control of the thinking processes so that an unorganized, drive-oriented type of thinking can occur. Gestalt psychologists (e.g., Kohler, 1969) employ the term "productive thinking" and "problem solving" to refer to what others might call creative thinking. The structural features of the problem itself set up stresses and strains in the thinker. By following up these stresses and strains, the thinker is led to a restructuring of the problem. Successive restructurings occur until a solution emerges.

Associationist theories involve the common assumption that creativity results from novel or unusual associations (Koestler, 1964, and Gruber, 1974). Mednick (1967) defined the creative process as "the forming of associative elements into
new combinations which either meet specified requirements or are in some way useful." The degree of creativity depends on the relative remoteness of the elements used to form the new combination. When asked to respond to a stimulus word, highly creative people are likely to give remote or uncommon responses; whereas less creative people tend to give only common stereotyped responses.

Koestler (1964) developed a "bisociation" theory of creativity. In bisociation, two independent matrices of ideas come into contact, but this occurs only subconsciously through a regression to the pre-conscious thinking processes stressed by psychoanalytic theories.

Hadamard (1945) theory combines psychoanalytic as well as associationist ideas. He proposes the same steps of the creative process as proposed by Wallas earlier: preparation, incubation, illumination and verification. The initial preparation period is conscious, systematic and logical but sets in motion some unconscious thinking processes that are essential to the incubation and illumination phases. The unconscious mind produces a vast number of associations among which only the potentially fruitful ideas, selected by the unconscious mind for their beauty or elegance, are allowed to reach consciousness in the phase of illumination. The last step of the creative process, verification of the value of the idea and establishing its implications, is essentially conscious.
Gruber's (1974) theory draws on the associationist and Gestalt positions as well as on Piaget's theory of cognitive development. In his view, creative accomplishments are fueled by conscious, purposeful actions. Creative thought is preceded by a period of persistent search and enquiry. After such a period, idea discovery can occur. Discovery results not from a single association but from a succession of small changes or restructurings.

Two fundamentally different approaches to the study of creativity have been given by Mansfield and Busse (1982). First, creativity is considered in terms of test performance. The divergent thinking tests developed by Torrance (1962) and Guilford (1967) and others to measure divergent thinking abilities have often been used as measures of creativity. Divergent thinking tests use problems that allow many possible solutions. Researchers who use tests to measure creativity assume that the abilities being tested are essential to real life creativity and persons with high test scores have high potential for creative accomplishments. Secondly, real life creativity may be measured directly in terms of products such as poems, symphonies, books, inventions and scientific theories. Jackson and Messick (1967) have proposed that creative products are characterized by four features: novelty, value, transformation and condensation. A creative product must be novel, possess some value or appropriateness and
characterized by properties of transformation and condensation.

From the above discussion it can be said that development of creativity needs a good environment. Along with the intelligence and experience of the person, school organizational climate may also effect the creativity of the child to some extent. Because the individual would solve a problem and reach a solution by purely intellectual means and for that a congenial home and school climate is of great importance.

In the present study creativity has been operationally defined as "the process of sensing gaps or disturbing, missing elements; forming ideas or hypotheses concerning them, testing these hypotheses; and communicating the results, possibly modifying and retesting the hypotheses". (Torrance, 1965). Its measure is the score on Verbal Test of Creative Thinking by Baqer Mehdi (1985).

2.2 PERSONALITY:

Understanding the nature of personality is not an easy task as human personality is a complex phenomena and it can be interpreted differently.

According to Murphy (1947), "Personality is structured organism environment field, each aspect of which stands in dynamic relation to each other aspect. There is organization within the organism and organization within the environment, but it is the cross organisation of the two that is investigated
in personality research."

Some definitions look at personality of an individual, giving weightage to his unique qualities and characteristics. For example, according to Vernon (1957), "we mean by it simply, what sort of man is so and so, what is the like?.... While a man's intelligence, his bodily strength and skills are certainly part of his personality, yet the term refers chiefly to his emotional and social qualities, together, with his drives, sentiments, and interests."

Stagner (1948) is more concerned about the person's inner system and defined personality as an inner system of beliefs, expectancies, desires and values. Cattell (1956) equates personality with the individual aspects of behaviour. He directs his attention to the behaviour of the individual and maintains that it should have predictive power. He defines personality ".... is that which permits to a prediction of what a person will do in a given situation.... Personality is concerned with all the behaviour of the individual both overt and under the skin." Eysenck - accepted this definition in his (1960) work, the structure of human personality. Eysenck's own definition of personality is an analysis of behaviour as he believes in the continuity of behaviour. Eysenck (1960) defines personality "as more or less stable
and enduring organization of a person's character temperament, intellect and physique which determines his unique adjustment to the environment." He distinguished four sectors of personality: (a) Cognitive Sector (Intelligence), (b) Conative Sector (character), (c) An affective Sector (temperament) and (d) Somatic Sector (constitution).

In the words of Hall and Lindzey (1964), "Personality consists concretely of a set of values or descriptive terms which are used to describe the individual being studied according to the variable or dimensions which occupy a central position within the particular theory described." In the work of Thorpe and Schmuller (1965), "An adequate definition of personality needs to emphasize the point that the individual is a human being emmeshed in a social order and symbolic culture which influences his every action."

According to Allport (1966), "Personality is the dynamic organization within the individual of those psychophysical systems that determine his characteristic behaviour and thought". "Dynamic organization" emphasizes the fact that personality is constantly developing and changing; although at the same time there is an organization or system that binds together and relates the various components of personality. The term "Psychophysical reminds that personality is neither exclusively mental nor exclusively physical. The 'Organisation' entails the operation of both body and mind, inextricably fused into a personal unity. The word 'determine' makes clear that
personality is made up of determining tendencies that play an active role in individual's behaviour. "Personality is something and does something. It is what lies behind specific acts and within the individual", This definition reflects that man's personality is organized which is constantly evolving and changing. Man is both brain and body with the help of which he does something which makes him different from others. Therefore, every human being is unique in time, place, person and adjustment quality.

There are three main approaches to the study of Personality:

1) Conflicting approach given by Freud (1949)
2) Fulfilment approach given by Rogers (1962)
3) The Behavioural approach given by Adler (1924).

(i) The Conflict approach - assumes that personality is shaped by a constant conflict between internal forces. According to this approach, life is a compromise between these forces.

(ii) Fulfilment approach - to personality assumes that a single force impels people to strive constantly for fulfilment and an understanding of their environment. Life is not a compromise but a continual struggle for fulfilment and/or perfection.

(iii) The Behavioural approach - in general suggests that
behaviour, and therefore, personality is the result of external influences such as reinforcement and punishment.

Freud's (1949) approach to personality is called psychoanalytic theory. The method of therapy based on Freud's theory is called psychoanalyses. Freud stated that there are three levels of consciousness. The first is conscious behaviour, the thoughts, feelings and actions of which people are aware. The second preconscious behaviour is mental activity that people can become aware of only if they attend to it closely. The third level the unconscious, is mental activity that people are unaware of and cannot become aware of except through certain techniques.

According to Freud's theory, the primary structural elements of personality are the id, ego and super ego and these three forces reside in the unconscious. Each accounts for a different aspect of functioning. The id is the source of a person's instinctual energy. It works on the pleasure principle which assumes that people try to maximize immediate gratification. Freud's considered much of a person's instinctual energy to be sexual and he rests as aggressive.

The second major component of functioning is the ego whereas the id. seeks to maximize pleasure and to obtain gratification, the ego (which grows out of the id.) seeks to satisfy the individual's instinctual needs in accordance with reality. It works on the reality principle. Whereas the id.
is demanding, unrealistic and works by the pleasure principle; the ego is patient, reasonable, and works by the reality principle. Superego, is the moral self. When id, ego and super ego are not in harmonious relationship or are out of balance, anxiety develops.

Rogers (1962) believes that fulfilment is the motivating force of personality development. According to Rogers (1962) people try to express their capabilities, potential, and talents to the fullest extent possible. Rogers suggests that an inborn tendency in people directs them towards actualizing their inherited nature, and thus fulfilling potential. Rogers (1962) makes two basic assumptions about behaviour. He assumes that behaviour is goal directed and worthwhile. He also assumes that because people are innately good they will almost always choose adaptive, self-actualizing behaviours.

Rogers' (1962) theory of personality is structured around the concept of self. SELF - the main structural component of Roger's theory of personality. A group of perceptions that characterize an individual and his or his relationship to others and to other aspects of his or her life. Rogers' theory assumes that individuals are constantly engaged in the process of fulfilling their potential, or actualizing the true self. Rogers suggests that each person has a concept
not only of self but also of an ideal self. Ideal self is that self a person would ideally like to be when correspondence exists between the self, a person is generally happy. In contrast, a great discrepancy between the real self and ideal self often results in feelings of unhappiness and dissatisfaction. Rogers' basic principle is that people have a tendency to maximize self concept through self actualization. Self actualization for Rogers, the continuous growth of the self towards the ideal self.

Rogers' (1962) concept of personality shows an abiding concern for individual development. Rogers stresses that each person must evaluate his or her situation from a personal (internal) frame of reference, not from the (external) framework of others, unhappiness is the result of too great a discrepancy between the real and ideal selves, but the individual can reduce or eliminate that discrepancy. Thus each person's happiness lies within his or her conception of self.

Rogers' and Freud's theories of personality make fundamentally different assumptions about human nature and how it is expressed in behaviour or personality.

Adler (1924) was heavily influenced by Freud, and many consider his theory an extension of Freud's. Adler focussed not simply on the self, but on the self as a member of society.
Adler believed that people strive unceasingly to better themselves but, unlike Rogers, also believed that people also strive constantly for perfection and superiority.

Adler (1924) believed that people are basically good and that their core tendency is to strive toward superiority or perfection. Whereas Rogers stressed fulfilment through self-actualization, Adler stressed fulfilment through striving toward specific goals. Some goals are fictional and unlikely to be reached. Adler spoke of fictional. Fictional – a goal state that is impossible to realise but acts as one of the energizers of behaviour (Adler, 1924). According to Adler, people are motivated, or energized, to strive for superiority and ultimately perfection, by feeling of inferiority; when people experience a sense of imperfection they seek to improve themselves. Thus feelings of inferiority are not a negative factor; they compel people to strive for superiority and thereby express their core tendencies.

A crucial aspect of Adler's theory is the idea that people are inherently social being. Adler recognized that from birth on, people interact with parents, family and society. These innate social qualities temper people's drives for superiority. Feelings and goals are superiority in different areas of life. Some people may seek to be superior artists, whereas others may seek to be superior social advocates or
homemakers. Each person develops a unique style of life in which attitudes and behaviours express a specific approach to achieving superiority. Because humans are social beings, they will seek goals and values that are basically social in nature.

Both Adler and Rogers assume that humans can and will fulfill themselves whenever possible. Whereas Rogers stresses self-actualization, Adler's emphasizes an innate social need motivated by feelings of inferiority to strive toward perfection and superiority.

Children react to the same kind of situation in different ways according to their personality differences. Some children are sluggish, some are active. Some become conscious while others do not feel perturbed what is happening around them. Some children work in a relaxed mood while others feel tense. Some are bold, others are weak. Organizational climate to a great extent influence the personality make up of the children.

For the present study, personality has been taken as defined by Cattell and Eber (1967), i.e. which permits a prediction of what a person will do in a given situation and is concerned with all the behaviour of the individual, both overt and under the skin, and scores obtained on 16 Personality Factors Questionnaire (Indian adaptation by
Kapoor and Tripathi (1982) are measures of personality.

2.3 ACADEMIC ACHIEVEMENT

The process of education includes three major divisions—formulation of objectives, designing learning experiences for the achievement of objectives, and assessing the outcomes of education. As such, testing and measurement areas are old as or rather older than any system of education. They have been used for the process of educating and advising young people.

Meaning of Achievement

The word achievement means the end gained or level of success attained by an individual or group on the completion of a task whether it be academic, manual, personal or social. Academic or scholastic achievement means the attained level at which the student is functioning in school tasks such as Hindi or Mathematics or Science as measured by school marks or grades, earned. In trade, the occupation, it will mean the change in the level of skills attained as measured by marks or grades. Achievement, thus mean all those behavioural changes which take place in the individual as a result of learning experience of various kinds.

Traw (1960) defines academic achievement in any subject, attained ability or degree of competence in school tasks usually measured by standardized tests and expressed
According to 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 (1959), 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.

J. Pressey, Robinson and Horrock (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 (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."

The need for measuring academic achievement is based on two fundamental assumptions of psychology. 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.
Academic achievement at a particular level is also influenced to a great extent by the organizational climate. A child is making good progress in one organizational climate while the same child may not perform well in other type of organizational climate and hence the linkage of academic achievement with the school organizational climate.

Academic achievement of the adolescents was measured by taking their score on final examination of the Class Xth.