CHAPTER-I

BACKGROUND OF THE STUDY

1.1 Introduction:

To begin with, it will be appropriate to consider a few definitions of creativity proposed by different phychologists. Simpson (1922) defined creative thinking ability as the initiative which one manifests by his power to break away from the usual sequence of thought into an altogether different pattern of thought. Concerning the problem of identification, he says that we must look for a searching, combining, synthetic type of mind. Such concepts as curiosity, imagination, discovery, innovation and invention are prominent in discussions of the meaning of creativity.

On the other hand, working definition of creativity used by Stein (1964) is that a process is creative when it results in a novel work that is accepted as tenable or useful or satisfying by a group at sometime. The definition of creativity is generally criticised on the ground that to impose any restriction of usefulness and value upon our definition of creation is to reduce it meaningless. This definition negates the creativity of persons inventing and perfecting nuclear weapons. The history of world bears a testimonry to this unfortunate fact that society invariably made fun of those individuals who had the courage to put forward novel ideas. On the top of it, cruel
methods were employed to throttle their voice forever. Thus, social approval is not an appropriate touchstone to judge the creativeness of a process.

Sir Frederick Bartlett\(^3\) (1959) employs the term 'adventurous thinking' which he characterizes as "getting away from the main track, breaking out the mould, being open to experience, and permitting one thing to lead to another".

The first major experimental attempt which showed that creativity as a function of the intellect was that of Guilford. In his monumental work on the structure of the intellect, Guilford was able to demonstrate 'divergent thinking' as one of the most important intellectual operations by which the 'product' or end result in the thinking process is reached. The other general areas in mental operations which he discussed were cognition, memory, evaluation and convergent thinking. Guilford defines 'divergent thinking' as a kind of mental operation in which we think in different directions, sometimes searching, sometimes seeking variety. At least three such factors are recognised, namely fluency, flexibility and originality, each of which shows itself in particular forms according to the contents (figural, symbolic, systems, transformations, implications) with which it is concerned. He points out that it is the relative variety and novelty of the products found in divergent production that link this category of abilities logically with creativity.
The structure of intellect model, which Guilford first presented in his presidential address to the American Psychological Association in 1950, has continued to be modified since then. Guilford had originally thought that the abilities involved in creative thinking were those which he had defined as divergent production and transformation. He now holds that the divergent production abilities are not the only ones which contribute to success in creative performance. Instead, in each operation area, there is supposed to be a set of transformation abilities which may contribute to creative potential.

After examining a large number of definitions of creativity given by different writers, Torrance (1962) concluded, "Some definitions of creativity were formulated in terms of a product (invention, and discovery, for example); Others, in terms of a process, a kind of person, or a set of conditions. The production of something new (to the individual or to the culture) is concluded in almost all of these definitions. Then, Torrance defined creativity as "a process of becoming sensitive to problems, deficiencies, gaps in knowledge, missing elements, disharmonies, and so on; identifying the difficulty; searching for solutions making guesses, or formulating hypothesis about the deficiencies; testing and retesting these hypotheses and possibly modifying and retesting them; and finally communicating the results."
Mednick (1962) studied and analysed the introspections of highly creative persons and came to the conclusion that creative thinking implies forming of associative elements into new combinations which either meet specified requirements or are in some way useful. He considered the number of associational responses and the uniqueness of these responses as two important dimensions of creativity.

Wallach and Kogan (1966) agreed with Mednick and observed that creativity most appropriately refers to the ability to generate or produce, within some criterion of relevance, many cognitive associates, and many that are unique.

Anderson (1958) has proposed that creative ability is most frequently the opposite of good judgement. Creative ability includes the tendency to experiment with novel ideas that might be unsound. It includes a good deal of the gambler's spirit where the individual "sticks his neck out" and tries something new perhaps even 'wild or crazy'. Therefore, by its very nature, creative ability is on the opposite end of the scale from good judgement.

Summing up the essence of creativity, Fange, E.K.Von (1959) observes that each creation involves a new association of existing elements, as far as the creator himself is concerned. This association
might include an existing device or mechanism, a fundamental law or a just discovered effect, or a change in an attribute such as size, shape or colour. It could be a new combination of musical tones, a new choral arrangement, or a new sequence and timing of notes. It could be a new emphasis in sculpture or painting. These essence of creativity has always been the forming of already existing things or attributes into a new combination.

From the above discussion the investigator would like to explain creativity in the following manner:

i) Creativity is a mode of thinking.

ii) This type of thinking involves breaking away from the usual sequence of thought or getting away from the main track or breaking out of the mould.

iii) This type of thinking involves entering into an altogether different pattern of thought.

iv) This type of thinking permits one thing to lead to another.

v) The process of this type of thinking involves becoming sensitive to problems, deficiencies, gaps in knowledge, missing elements, disharmonies etc.
vi) It is the tendency to experiment with novel ideas.

vii) The net result of this type of thinking is a novel work.

viii) A novel work implies a new association or combination of existing elements.

ix) The creative thinking ability aims at avoiding the common place and obvious solutions.

1.2 Creativity Syndrome:

Creativity is a complex blend of a number of abilities and traits. Some of the more important abilities are:

(a) Sensitivity to Problems:

Human life is beset with numerous problems. Sometimes we are surrounded by problems but we are not aware of them. A creative person senses the presence of a problem instantaneously and girds up his loins to find a satisfactory and acceptable solution to the problem. We can ask questions concerning the defects or gaps in objects, institutions or administration in order to ascertain whether the students are aware of problems and gaps or not.
(b) **Ideational Fluency**:

On a particular topic or a problem, a creative person can express his ideas very fluently. To identify this ability, the students can be asked to express their ideas on a given topic in limited time. The relevant ideas given by an individual are counted to ascertain the level of his creative thinking ability.

(c) **Flexibility**:

A creative person's thinking is characterized by flexibility rather than rigidity. The ideas expressed by him on a particular topic are not the same type; that is, they do not belong to one and the same category. Suppose they are asked to give their suggestions to bring about improvements in their school. The suggestions advanced by them will be of different categories, that is, some of the suggestions may be related with replacement of present things, some of them may be concerned with introduction of some novel features, whereas some others may be related with effecting some changes in the present things. To evaluate this ability, the ideas expressed by an individual may be categorised and the number of the categories may be counted.
(d) **Originality** :

Originality is the most important element of creativity. While expressing his ideas on a certain topic or devising solutions for every day problems, a creative person will put forward such ideas as are original or they are indirectly based on ideas previously read or heard. To determine this ability, original ideas out of total ideas expressed by an individual should be counted. An idea advanced by only two or three percent of the subjects can be accepted as an original idea. Thus, statistical infrequency is the criterion to determine originality of a response.

(e) **Transformation** :

The ability to transform the existing objects into novel ones is also included in creativity. To ascertain this ability, the students are required to give meanings or uses of an object rather than its usual or most common meaning or use.

(f) **Curiosity** :

Curiosity is an important element of creativity. The creative person is always anxious to understand each and everything of his universe. He remains restless until he is able to understand completely what he has heard or read. Such individuals with limitless curiosity succeed in making discoveries and inventions.
(g) **Imagination**:

Imagination occupies an important place in the creativity syndrome. In fact, one form of imagination 'Creative imagination' is synonymous with creativity. A number of abilities included in creativity are based on imagination. Only a person with imaginative mind can express a greater number of ideas fluently; his thinking will be characterized by flexibility and originality. Besides, he has the ability to transform the existing things into novel ones.

1.3 **Theories of Creativity**:

There are some well-known theories of creativity which were accepted by many educationists and Psychologists. They are:

a) **Creativity as Divine Inspiration**:

Plato was of the view that a creative writer finds it difficult to exercise adequate control over himself. He is nothing but an agent of some higher power, Tagore too writes in the Gitanjali, "I am a dead reed, but you make it a flute by blowing various tunes through me over vales and hills". Most of the creative artists, especially poets and singers have often experienced that they are simply puppets in the hands of some higher power. They confess that some invisible but all powerful force makes them to create something new. This force knows no rest till it has drawn best out of them. This explanation of creativity is not open to scientific analysis because it relies on a purely subjective experience.
b) Creativity as Madness:

Nietschze was of the opinion that there must be chaos within to give birth to a dancing star. He seems to favour the proposition that abnormality is a pre-requisite for a creative artist. Even Plato could not distinguish well between divine inspiration and insanity. Van Gogh was dancing on the razor-edge of sanity and insanity all his life. The strength of his ego, which he attained through creative art, saved him. He had a great defense in his paintings. The sociologist Cesare Lombroso cited many creative men who were insane.

c) Creativity as Instuitive Genius:

According to this view-point, creativity is nothing but highly developed form of intuition. The creative person is a rare being. His intuition is direct and immediate. It is difficult to determine whether a mysterious force like intuition is a form of insight or not. The concept of genius originated in the late Renaissance, when it was applied to explain the creative powers of men like da Vinci, Vasari, Telesio, etc. Kant in his classical work 'The Critique of pure Reason', says that the creativity is natural, and therefore cannot be taught. But, some recent psychological researches have shown that creativity is more developable than intelligence. A large number of courses are being run U.S.A. and some other countries for the development of creativity and these courses are reported to have yielded good results.
d) Creativity as Cosmic life:

Darwin's theory of Evolution points out that human creativity is nothing but manifestation of creative force inherent in life in organic matter. This force continually brings forth such new species as are unique, unprecedented, unrepeatable and irreversible.

Human creativity has also been as the expression of a universal creativity. According to A.N. Whitehead, creativity is rhythmic or cyclical, for the world consists not of a stream of single events, but rather of events that constitute actual entities, which take birth, develop and die. The process of education should reflect the creativity of the universe as a whole. Thus, education should be rhythmic. It should move in cycles, each of which should pass through its own stages of Romance precision and generalization. Romance is the stage of first encounter with the subject, whereas Precision is the stage in which order and system are introduced. Generalization is the stage where abstract principle are derived. Thus education is an inherent need of the learner, not something to be forced from outside. Therefore, the best sort of education responds faithfully to the cosmic creative force itself. Thus it becomes the foremost duty of a teacher to weed out foreign matter and prune undesirable growth. A ruthless definiteness is essential in education.
e) **Creativity as Association**:

During the 19th century, the dominant school of psychology in both America and England was Associationism, whose roots go back to John Locke. Still it occupies an important place in behaviourism. This school maintains that thinking is the association of ideas, which is governed by the laws of frequency, recency and vividness. New ideas are evolved from older ones by a process of trial and error. Hence more association leads to more ideas which in turn lead to more creativity. But prediction in creativity is not possible, whereas Association theory presupposes prediction. Also Association hardly fits in the known facts of creativity. Arthur Koestler made a study of the great scientists of Renaissance and published the report of his study in the book entitled 'The Sleepwalkers'. In this book he lays special emphasis on the seemingly irrational slips and errors which actually helped Copernicus, Kepler and Galileo in formulating their theories. The new ideas, thus, do not emerge from past connections. In fact, they emerge by breaking the past connection. The unconscious mind, most probably the source of new ideas, is not determined by past connections.
(f) **Gestalt Theory and Creativity:**

Creativity involves restructurization of patterns or Gestalts that suffer from some structural deficiency. Creative thinking begins with a problematic situation. A creative thinker is quick to sense the gaps or missing elements in the existing knowledge. This sensitivity gives a "push" to his creativity. In the absence of a problem, he has to start a problem of his own creation, that is, he starts with an envisaged or imagined Gestalt. However, this theory does not explain the origin of the envisaged Gestalt and also that of the original questions which are not suggested by the known facts.

g) **Psycho-analysis and Creativity:**

According to Freud, Creativity owes its origin to conflicts within the unconscious mind. Sooner or later, the unconscious succeeds in finding appropriate solutions to the conflicts. If the solutions are ego-syntonic (i.e. if they reinforce an activity intended by the ego or conscious part of the personality), they will issue forth in creativity. On the other hand, the solutions which do not reinforce an activity intended by the ego, are repressed and then emerge as Neurosis. Thus Neurosis and Creativity have the same roots and can rightly be called siblings. According to Freudian viewpoint, the creative person accepts the free-rising ideas of the unconscious and gives them a novel shape.
Freud maintained that creativity helps a conflict ridden person in releasing his inner conflicts. Thus creativity, as viewed by the psychoanalysis, is a sort of emotional purgative that helps a person to maintain his mental equilibrium. Freud's description of a neurotic makes his theory of creativity amply clear. He says, "A neurotic is an artist san art, that is, a neurotic is that artist who has not created art. Catharsis occupies the central place in psychoanalysis. This, however, is a negative view of creativity. It means there would be no creativity in the absence of conflicts and tensions. Creativity is not considered here as a positive attempt on the part of the individual to construct something but simply a means of releasing the conflicts. This has been a popular belief too. The layman feels that a person turns an artist after receiving a big 'shock' in life.

The Neo-psychoanalysts, however, reject the view that a person has to be emotionally disturbed in order to create something new. In some cases, creativity and neurosis can be found simultaneously in the same person. This does not mean that the person is creative because of his neurosis. In fact, this phenomenon of co-existence can be better explained by saying that such persons create despite their neurosis. A number of researchers have recently found that the correlation between the two is not positive and high. Also it has been found that persons creative in the field of sciences, engineering, medicine and agriculture etc. are emotionally stabler than those who are creative in literature, music, painting and sculpture.
Also Freudian view that creativity is a recapitulation of early childhood experiences does not find favour with existentialists like Jean Paul Sartre, Rollo May, and eccentrics like J.W. Allport. According to Freudian viewpoint, creativity like all other activities is tension-reduction process. According to E.G. Schachtal, C.R. Roers and some other modern thinkers, creativity though partly drive-reducing, is also sought as an end in itself. Writers may write for the sake of writing and musicians may compose beautiful tunes for the sake of composing them. It is a more positive view of creativity.

The Neo-Freudians have emphasized that creativity is the product of pre-conscious, rather than the unconscious. Creativity is a regression permitted by the ego in its own interest. The creative person possesses the ability to draw on his pre-conscious more freely than other people. Imagination is an extremely important element of creativity. Though it is present in some degree at all levels of mental activity, yet it is especially strong in pre-conscious. According to J. Krishnamoorti, 'stillness of mind' and 'choiceless awareness' are most essential for becoming creative. 'Stillness of mind' is possible only in trance, attained through hypnotism or yoga, where the ego is suspended in the semi-conscious for a pretty long time. When we awake, for the ego is ordinarily in the conscious sector of our mind. When we fall asleep, the ego regresses to the
unconscious. While awake, we can communicate only with the conscious. While asleep, the ego cannot be contacted. The ego can be approached only in the pre-conscious. Then it becomes possible to tap the unconscious which happens to be so near the pre-conscious. Many people hold the belief that highly creative persons possess the ability for autohypnosis which enable them to suspended their ego in the pre-conscious for a long time. From this point, they can communicates effectively with their unconscious. Thus, fore-conscious is the most fertile ground for the growth of creativity.

It will be in the fitness of things to mention here Arthur Koestler's book, 'Act of Creation'. In this book, Koestler makes an attempt to synthesize all the theories of creativity. He contends that all creative processes share a common pattern of Biosociation which connects previously unrelated levels of experience or frames of reference. Creative thinking involves thinking simultaneously on more than one plane of experience, whereas routine thinking implies following the path set by past associations. Thus it is evident that none of the theories is in a position to explain the causes of creative behaviour single-handedly. Many theories will have to be combined to understand clearly the causes of creative behaviour or manifestations of creativity.
1.4 Essential Requirements for Creativity:

An appropriate sphere is an essential requirement for creative functioning. We cannot except a good crop from a good seed without suitable soil. Likewise, flourish in the absence of an appropriate sphere.

New ideas come to light and flourish as a reaction to older concepts. Prudent criticism of older concepts and acceptance of their valuable parts are two ingredients of creativity. While thinking about the achievement of their ancestors, the creative individuals makes an attempt to accept useful results of their efforts. Accepting the ideas and beliefs of others is one of the important essentials of creativity. Thus absorbing previous knowledge and hesitating to accept it is complete and faultless are included in creativity.

Without making adequate and serious efforts in one's sphere, one cannot find solution to one's problems all of a sudden. No other person than practising doctor can make investigation about various diseases determine their causes devise appropriate treatment for them. To make an attempt to gather maximum possible information concerning one's sphere is to make preparation for innovations.

After making full preparation, the individual apparently becomes passive or gets absorbed in some other activity. This period of apparent in activity
is known as the period of incubation. This period is conductive for creative thinking. Very frequently it is found that literature of top quality is the product of this stage.

While making use of his creativity, a creative individual unconsciously picks up some ways and practices which become his temperamental habits. The process of their creative thinking does not get in motion if they are not provided suitable environment in accordance with their temperamental peculiarities. Zola used to draw blinds even during daytime so that artificial light could be arranged because it greatly stimulated his thinking.

Original thinking and original writing are hard exercises. They require setmost concentration and tolerance. It is not essential that an individual will reach the peak of success in the first attempt. To embrace success, the individual has to put in hard efforts continuously despite initial reverses. Thus, possession to remarkable tolerance is an essential pre-requisite for some important creative achievement.

Emotions, feelings, mental status and temperament are also important for creative functioning. In addition to these factors, an individual strives continuously for the development of his creative potential because of his desire for
social prestige. Sentiments like love, spirit of service and patriotism also prove conducive for the development of an individual's creativity. Besides, freedom from economic worries is also essential for optimum functioning of creativity.

An adequate level of intelligence is an essential condition for creative ability. Mentally deficient individuals cannot be expected to be creative persons.

References

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