CHAPTER II
THEORETICAL PRESENTATIONS OF CREATIVITY

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CHAPTER II
THEORETICAL PERSPECTIVE OF CREATIVITY

2.0.0 CONCEPT OF CREATIVITY

2.1.0 INTRODUCTION

Standard dictionaries give meaning and definition of words; not routinely used, by explanation in terms of simple and common words in day to day use. However in present day context the understanding of the word creativity has assumed significance and meaning cannot remain confined within the framework of the dictionaries. Creativity could not fetch a single definition because the different thinkers consider it from different perspectives. The different perspectives that have been adopted to study creative functions indicate that we are confronted with a highly complex phenomenon. As different thinkers psychologists, educationalists etc., consider its different dimensions, there exists a large number of definition of creativity. Mcpherson\(^1\) (1960) collected 26 different definitions of creativity. Morgan\(^2\) in 1953 published a list of twenty five definition which were available in different literature during the years preceding it.

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Mednick\(^3\) (1964) could get 395 different meaning response to a stimulus word creativity at fifth Utah conference.

After examining a large number of definitions of creativity given by different writers Torrance\(^4\) concluded "Some definitions of creativity were formulated in terms of a product (e.g. invention and discovery) other in terms of process, a kind of person or a set of conditions". On the basis of an analysis of the diverse ways of defining creativity and the requirement of a definition for keeping a programme of research focussed on factors affecting creative growth in context.

A thorough analysis of fifty definitions of creativity was done by Rhodes\(^5\) (1961) who indicated four strands (Ps) of creativity, person, process, press and product-various theoreticians or systematic investigators in the field of creativity have used either one or a combination of these four strands of creativity.

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2.1.1 PERSONALITY PROFILES APPROACH

The study of creativity is the explanation of cognitive variable. Simpson\(^6\) (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 thoughts, he emphasized the mental qualities for searching curiosity, imagination, discovery, innovation, and invention prominently to indicate creative potentials. Wallas\(^7\) (1926) recognized that a great number of abilities are involved in creative thinking.

Guilford\(^8\) emphasized divergent productive ability of the individual. In his model of structure of intellect, he emphasizes creativity as an individual's ability of generation of information from given information where the emphasis is upon variety of output from the same source. He analyzed additional factors that were put in his scheme of classification of human abilities. He was able to represent four fluency factors namely associational, expressional, word, and ideational, and two flexibility factors namely spontaneous and adaptive. This was the first study which

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provided a basis for practical and empirical explanation about creativity. Barchillon\(^9\) (1961) divided creative thinking into two types of abilities cognito and intelligo. Torrance on the basis of various studies done in this area, sorted out the important characteristics of creative people. Crutchfield\(^{10}\) (1962) and Wilson have thought of creative person as a conformity contrasting. He thought of a creative person as an independent functioning unit. He considered that a creative person himself has a unique personality, he is different from common man in structure of his personality. These definitions stress human potentials more than in the creative process or product or the ethnology behind creation.

2.1.2 A PROCESS APPROACH

There are certain views regarding creativity which emphasize more on process rather than a person. Spearman\(^{11}\) (1930) thought of creativity as purely process but Barchillon\(^{12}\) defined creativity

\[ \text{Equation} \]


12. J. Barchillon, op. cit.,
as thinking process involved in creation are of two kinds cognito
to shake and through things together and intelligo, to choose
and discriminate from many alternative possibilities and then
synthesize and bind together elements in new and original ways.
He has taken a broad based view and defined the process clearly
of its both functions for the product which must be unique other­
wise the process cannot be creative. Thus the creative activity
is dominated by an emphasis on achieving the products. Foghay
(1962) considers the product as a part of creative process.
Maslow (1962) believes that creative thinking and for that matter
all learning and thinking involves pre-conscious rather than
conscious processes.

After studying number of prolific inventor Rossman (1931)
suggested following set of steps of the inventive process:

Creative in Teaching Belmont, California Wadsworth Publishing
Co. Inc. 1962.

of Individual Psychology. 14. 51-56.

15. J. Rossman. The Psychology of the Inventory.
1. Need is being felt
2. Problem is formulated
3. Information is surveyed
4. Solutions are formulated
5. Solutions are critically examined
6. New Ideas are formulated
7. New Ideas are tested and accepted

John Dewey\textsuperscript{16} was the first person who attempted to describe the creative thinking process as awareness; that a problem or a difficulty exists; analysis of the problem; leading to understanding of its nature; suggestion to its possible solution; and testing the alternative solution by a process of judgement and accepting or rejecting solution. Graham Wallas\textsuperscript{17} (1926) also suggested similar stages used in creativity or productive thinking which are mentioned below:

**PREPARATION**

Collection of data. This includes the whole process of intellectual education with its training in a experimental and logical procedures, as well as the process of acquainting oneself with background facts and knowledge.

\textsuperscript{17} G. Wallas. op. cit.
INCUBATION:

Unconscious work. Incubation is a particular stage in creative thinking in which apparently there is no activity on the part of individual but during which the creator interlink various relation and find certain solution - a solution to a problem or strikingly new idea. This stage is similar to the latency period of Freud - a period of internal maturation.

ILLUMINATION:

Inspiration of solution, ideas etc. It happens when incubated parts form into a recognizable and meaningful experience. During this stage a meaningful material comes up. Wallas stage of illumination in creativity thinking is a much talked of event. Many creative thinkers believe it to be source of their bright ideas, it is a state when an individual takes a sudden large leap in his thinking.

Theoretically it is believed by some researcher that - the willingness to resort to intuitive solution the conditions under which insight occur are related to the mental activity - previous experience - level of motivation - mental disposition at the time of illumination etc., are reasons of proceeding illumination.
VERIFICATION OR EXECUTION

This stage involves elaboration and evaluation of the created ideas. The implicit experience is transformed into subjective symbolic form after testing the validity of the concepts.

Finally a process oriented definition given by Torrance\textsuperscript{18} which includes all the steps of the creative thinking process suggested by Wallas and Rossman.

"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 ".

2.1.3 ENVIRONMENTAL PRESS APPROACH

This stands for the interaction between human beings and their environment. Regarding environmental correlates Taylor and Barron\textsuperscript{19} have observed :

\textsuperscript{18} Torrance and Myers R.E. Creative Learning and Teaching New York, Dodd, Mead and Company Inc., 1970. (3rd printing).

"We are perhaps more in dark about environmental conditions which facilitate creativity than we are about any other aspect of the problem. Beyond obvious conditions such as the need for ample time in which to work freely on problems of one's own choice little is known."

According to Chambers\(^20\) - creativity is multidimensional process of interaction between the organism and environment that results in the emergence of a new and unique product. While Vinacke\(^21\) has aptly defined creativity "as an integrated harmony between external world of reality and individual's internalized needs.

Certain important factors like democratic conditions in group work, freedom of expression and movement, lack of fear of failure and provision of psychological safety encouragement and motivation, playfulness, breaking the barriers of conformity, family environment and background play very important role in proper nature of creativity of an individual.


2.1.4 A PRODUCT APPROACH

The product made by a creative individual is in sense a measure of creativity newness or uniqueness a prominent feature of the creative products. Rhodes\textsuperscript{22} define creativity as a noun naming the phenomenon in which the person communicate a new concept. For Stein\textsuperscript{23} creativity is the process resulting in a novel work that is accepted as tenable or useful or satisfying by a significant group at some point in time.

Thurstone\textsuperscript{24} neglected the view of usefulness of product. According to him the criterion of social appreciation of the meaningfulness and novelty of the product is not necessary because it does not make any difference whether society regards the idea novel or not.

Finally whether it is person or process or press or product, a general idea regarding the definition of creativity that can be drawn stand to include maximum indicators of creativity. Lehois\textsuperscript{25} (1963) tried to combine those Rhodes strands and defined creativity.

\begin{itemize}
  \item \textsuperscript{22} Rhodes M. Analysis of Creativity. Phi Delta Kappan Vol.XLII (1961) 305-310.
  \item \textsuperscript{23} M. I. Stein. Creativity and Culture. Journal of Psychology, 1953, 36. 311-322.
  \item \textsuperscript{24} L.L. Thurstone. Primary Mental Abilities. Psychometric Monograph, 1938.
\end{itemize}
A critical survey of various definitions of creativity stated above, brings following points about creativity:

- Creativity is mode of thinking.
- This type of thinking involves breaking away from the usual sequence of thought of getting away from the main track or breaking out of the mould.
- This type of thinking involves entering into an altogether different pattern of thought.
- Emotions, feeling, mental states and temperaments are also important for creative functioning.
- A person develops creative potential because of his desire for social prestige.
- Sentiments like love, spirit of service and patriotism also prove conducive to the development of an individual's creativity.
- Freedom from economic worries is also essential for the optimum functioning of creativity.
Creativity has manifold meaning, some think of it as personality trait function, psychologists think it as unconscious function, some consider it a process, some think of it as function of motivation etc. These multiferous considerations compel us to give rise to such thinking, and the bases that psychologists undertook in theoretical as well as empirical discussions to understand and determine creativity.

Hallman\(^{26}\) (1963) has suggested five criteria mainly, connectedness, originality, non-rationality, self-actualization and openness. Jackson\(^{27}\) (1965) suggested four, unusualness, appropriateness transformation and condensation and Mednick\(^{28}\) (1962) suggested usefulness only.

**2.2.1 CONNECTEDNESS**

This involves employment of some 'relation' - the relation of similarity which has a connecting power. The psychological terms like combination, composition, configuration novel relationship, new organization, purposive pattern formation, complete relatedness,

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Integration are synonymous to this connectedness. Ghisellian\(^\text{29}\) (1952) considered creativity as the combining of the past experiences into new pattern or new configuration which in some manner satisfy the creator and society. Some psychologist agree to the need of connectedness in creativity by whatever name they call it, and whatever be the its nature perceptual, intellectual or otherwise. Thus this view connected.

2.2.2 ORIGINALITY

This is refer to newness of produced relation or products. The originality distinguish the unique with mechanical or repetitional product, with the notion that the former does not resemble the already existing ones but the latter exactly does. Hallman\(^\text{30}\) (1963) pointed out four main characteristics or originality novelty, unpredictability, uniqueness and surprise. Guliford thought of originality as temperamental trial also. Schachtel\(^\text{31}\) (1959) believed that originality produces 'emotive shock' and that it erupt with suddenness in condition of unfettered and upon encounter

\[\text{30. R.J. Hallman. op.cit.}\]
with the world.

2.2.3 NON-RATIONALITY

The phenomenon of creation can be explained through certain processes—primary processes, energy dynamics, mental process, thinking process etc., which metaphorically symbolize processes producing new connection. It is non-rational because the combinational activity occurs in the form of unconscious operations. Rationality finds differences between the objects; non-rationality though a condition of novelty unites, relates and flourished similarities. Yet it is cause, because relationship between certain unconscious process like connectedness, and production of new connection is causal non-rational process provides plasticity to ideas and images. The non-rational mechanisms which produces the new vision constitute energy system of creativity and function similarly in all creative persons, whether they be scientist, artists or others.

2.2.4 SELF-ACTUALIZATION

Creativity involves a fundamental change in personality in the direction of fulfilment of growth. Maslow\(^32\) (1958) believed that creativity is universal characteristic of self actualizing.

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32. A.H. Maslow, op. cit.
people, it is fundamental characteristic of human nature; and it touches whatever activity a healthy person is engaged in but when it touches special talent it calls for creativeness. The self actualizing personality is characterized by an unusually strong motivational drive. These drives are pervasive, persistent and resist deflection. All the motivation theorists agree that motivational drives have important effect upon creative expression McClelland\textsuperscript{33} (1951) described that motives relate unity and integrate the diversity of needs and goals in behaviour provide organization, orientation, direction introduce directional trends, create need related imagery and increase interest in future possibilities.

2.2.5 OPENNESS

This condition assumes the characteristics of environment which facilitate the creative persons moving from the actual state of affairs towards solution. The environment may be of two types. Firstly the personal which is psychological but depending upon the second one that is social. The personal traits are acquired from the external environment that is society or home or school and other professional organizations. This environments provide 'openness' which Rogers\textsuperscript{34} (1961) defines as :

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"This the opposite of psychological defensiveness, when to protect the organization of self, certain experiences are prevented from coming into awareness except in disturbed fashion ... It means lack of rigidity and permeability of boundries in concepts beliefs, perceptions and hypothesis ".

It includes the following traits:

i. Sensitivity - It refers to awareness of things as they are rather than by predetermined set. The creative person is sensitive to the world of object and ideas, problems, other people gaps and unconscious impulses.

ii. Tolerance of ambiguity - It has various meanings like, ability to accept conflict and tension resulting from polarity, to tolerate inconsistencies and contradictions, to accept the unknown, to be comfortable and work with ambiguous, approximate and uncertain.

iii. Spontaneity - It provides a feeling of being free autonomous and undetermined. It allows the creative behaviour unbound and uncoupled from previous causal conditions, thus producing wonder and awe.

iv. Self-acceptance - One who tolerate ambiguity, uncertainties and conflicts for a long time enjoys and anchorage within some value system; and that is the 'need to be himself'. The forward pointing search for possibilities which characterise the creative process implies an
acceptance of self as a source of judgements. The creations take on the values which the individual assigns to them and it is on the basis of his own sensitivity for guidance as he himself speculates tests; modifies and postpones completion of the work.

The external factors are school, society, home organization etc., which are necessary to keep pace of creativity going on.

2.2.6 APPROPRIATENESS

This criteria is applied to the product or assessing the nature and quality of product. The criterion of appropriateness applies the principle of fitness which has a logical base. Appropriateness is a continuous quality, which exists in degrees. In lower form it can be recognized by its responsiveness and there is a sense of recognition in its assessment. In the viewer, the quality of appropriateness brings satisfaction or comfort arising from the recognition of demands of the creator and the products. Demand of creator is qualitative aspect of appropriateness and the creator's demand is quantitative one.
2.2.7 USEFULNESS

This criteria is given by Mednick (1963), according to him if the response is useful it must be creative. He stressed the point of giving the concept of usefulness because he realized that the criterion of unusualness of originality are not enough to explain creativeness.

2.2.8 TRANSFORMATION

Transformation involves a radical shift in approach to a subject or in handling material - the kind of shift for example cause by the introduction of the holocentric theory of Freud's earlist propositions. Transformation involves creation of new forms. But every new form may not be a transformation. Only those new forms which have heuristic power are transformation.

2.2.9 CONDENSATION

Condensation is found in most creative products. It is the enduring quality of the creative product. Condensation involves unity and coherence of meaning. It puts the essence of creative product which can be interpreted in multiplicity of ways by different viewer and even by the same viewer at different occasions.

2.3.0 IMPORTANT THEORIES OF CREATIVITY

Many psychologists and philosophers have made attempt to study the creativity with respect to its nature, components, process of creativity etc. As a result various theories are put forward, which are discussed in brief.

2.3.1 CREATIVITY AS DIVINE INSPIRATIONS

Plato was of the view that a creative writer finds it difficult to exercise adequate control over himself. He is nothing more but an agent of some higher power. Most of the creative artists especially poets and singers have often experienced that they are simply puppets in the hands of some higher power. Explanation of the theory is not scientific as they believe in invisible forces.

2.3.2 CREATIVITY AS A COSMIC LIFE

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

2.3.3 PSYCHO-ANALYTICAL THEORY

Freud (1958) believed that sublimation of repressed uncon-
-scious wishes, pregenital and libidinal urges determine creativity. According to this view creativity is not conscious function but a pre-conscious function. There are certain persons like Hadamard\textsuperscript{36} (1945) who believes that unconsciousness is also important. Kris\textsuperscript{37} (1953) proposed that in all creative thinking ego achieves some measures of control over the primary process. He told it as "regression in the service of ego" to refer to the capacity of gaining easy access to unconscious material without being overhelmed by it. It is this capacity which characterizes the creative person and the creative process. Bush\textsuperscript{38} (1969) believed that it is not clear how regression of ego, or emergence of unconscious ideas into conscious lead to significant solutions of problems in creation.

Followers of psycho-analytic view generally explain the productions of poet, artists and writers based on sublimation. The artist is a successful neurotic person who seeks through socially acceptable channel. The outlet of his unconscious

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conflicts. On the other hand, Kubie\(^{39}\) (1958) has rejected the viewpoint as he stated that neuroses, corrupt, mar, distort and block creativeness. If the neurotic succeeds in producing art objects, his unconscious dominates and the objects are expressions of neurosis. Then creativity is not possible.

Finally, as mentioned by Sharma.

Psycho-analytical theories provided much ground to the theory of creativity, but almost restricted the creative performances to visual artists and writers, such as poet. It considers mostly the motivational and emotional aspects and neglected intellectual ones to explain the phenomenon of creativity.

2.3.4 MENTAL HEALTH THEORY

This theory in real sense is the extension or modification of psycho-analytical ideas regarding creativity. According to Maslow\(^{40}\) (1958) creation is 'Complete character integration'. Thus creative process involves individual's ability to 'regress in the service of ego', retrieve material from preconscious and return with it to the world of reality. Thus the individual becomes a fully functioning person, which Maslow calls 'Self-actulization', the highest need in his pyramidal classification.

40. A.H. Maslow, op. cit.
To deal with complex materials as it is in creativity, depends not only on the material itself but on the emotional and ego strength of the individual.

2.3.5 GESTALT THEORY

Creativity involves restructurization of patterns or Gestalts that suffer from 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 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.

2.3.6 INTELLECT THEORY

This theory has empirical and statistical bases. Guilford\(^{41}\) (1956) believed that creativity is a group of mental abilities of that are covered by divergent thinking slab of the SI model. According to this theory which is drawn by divergent production process puts first, then four contents and then six products symbolized as:

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41. J.P. Guilford. op. cit.
Process | Contents | Products
--- | --- | ---
Divergent Production | Figural (F) | Units (U)
| Symbolic (S) | Classes (C)
| Semantic (M) | Relations (R)
| Behavioural (B) | Systems (S)
| | Transformations (T)
| | Implication (I)

The other four processes are cognition (C) Memory (M) Convergent production (N) and Evaluation (E) from which divergent thinking abilities cannot be drawn but without these creative thinking process shall not be completed. According to Guilford when divergent production process acts upon figural contents, for example, to give products of different units, classes, relations, systems, transformation and implications, they may be called non-verbal creativity. When symbolic and semantic contents are used they referred to verbal creativity and factors drawn for each product shall be ideational fluency, spontaneous flexibility, associational fluency, expressional fluency, verbal originality and symbolic or semantic elaboration. When behavioural contents are used these indicators show the behavioural performances of doing and seeking fluency, flexibility, originality and elaboration in dealing with other people around the creative individual. Thus Guilford believed that in the creatively gifted individual these abilities are highly endowed and in the non-creative individual they are low.
2.3.7 COGNITIVE THEORY

Like other theories of creativity this theory also reports only a limited view of creativity. This theory eliminated intellectual and personality dynamics but emphasize sense perceptions. This theory try to answer the question that how creative people perceive and think about things and events, from the point of view of cognitive styles which most effectively lead to the detection of novel information.

2.3.8 PERSONALITY TRAIT THEORY

This theory takes into consideration a great pile of human personality traits that are specifically found most in creative individuals. In fact this theory came out of various empirical studies of personality of creative persons in various fields. Most of these studies used various sources, like personality and temperament, questionnaires, TAT, personal data, rating etc., and showed a good number of characteristics.

Trait theory though very important is not by itself a complete picturesque of sound model. From the literature, it appears that specific creativity is more related to specific traits. Torrance\textsuperscript{42} (1962) compiled all such studies and told that eighty four such traits are significantly relevant for creative persons.

42. E.P.Torrance, op. cit.
Arthur Koestler in his book 'Act of Creation' 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 experiences. 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.

After studying the various theories it can be said that no single theory explained all causes of creative behaviour. Many theories will have to be combined to understand clearly the causes of creative behaviour or manifestations of creativity.