

Creative people

Literature



**ASSIGN
BUSTER**

Creativity refers to the phenomenon whereby something new is created which has some kind of subjective value (such as an idea, a joke, a literary work, a painting or musical composition, a solution, an invention etc.). It is also the qualitative impetus behind any given act of creation, and it is generally perceived to be associated with intelligence and cognition. Creativity can also be defined " as the process of producing something that is both original and worthwhile" or " characterized by originality and expressiveness and imaginative.

Creativity of ones suggestion could be rated in this way, fluency; this is defined as the total number of suggestion you are able to make. Flexibility; this is the number of times you shift from one class of possible uses to another. Originality; this refers to how novel or unusual your suggestion are. By totaling the number of times you show fluency, flexibility and originality, we could rate the creativity of your thinking in solving problems.

1. Orientation; this is the first step in which the problem is defined, and important dimension of the problem is identified.
2. Preparation stage; this is the second step in which creative thinkers get accurate information for themselves pertaining to the problem as possible.
3. Incubation stage; Incubation is a temporary break from creative problem solving that can result in insight. Most major problems produce a period during which all attempted solution would have proved futile. At this point problem solving may proceed on a sub conscious level while the problem seem to have been left aside it still cooking in the background.

4. Illumination; the stage of incubation is often ended by a rapid insight or series of insight. This produces the Aha experience, often depicted in cartoons as light bulb appearing over the thinker's head.

5. Verification; this is the final step which involve critical evaluation of the solution obtain during the illumination stage. If the solution proves faulty, the thinker reverts back to incubation stage. Convergent and divergent thinking
J. P. Guilford drew a distinction between convergent and divergent production (commonly renamed convergent and divergent thinking).

Convergent thinking involves aiming for a single, correct solution to a problem, whereas divergent thinking involves creative generation of multiple answers to a set problem. Divergent thinking is sometimes used as a synonym for creativity in psychology literature. Creative Cognition Approach
In 1992, Finke et al. proposed the " Geneplore" model, in which creativity takes place in two phases: a generative phase, where an individual constructs mental representations called preinventive structures, and an exploratory phase where those structures are used to come up with creative ideas.

Some evidence shows that when people use their imagination to develop new ideas, those ideas are heavily structured in predictable ways by the properties of existing categories and concepts. MEASURING CREATIVITY
Creativity quotient Several attempts have been made to develop a creativity quotient of an individual similar to the intelligence quotient (IQ), however these have been unsuccessful. In Malcolm Gladwell's 2008 book Outliers: The Story of Success, there is mentioning of a " divergence test".

As opposed to "convergence tests", where a test taker is asked to sort through a list of possibilities and converge on the right answer, a divergence test requires one to use imagination and take one's mind in as many different directions as possible. "With a divergence test, obviously there isn't a single right answer. What the test giver is looking for are the number and uniqueness of your responses. And what the test is measuring isn't analytical intelligence but something profoundly different -- something much closer to creativity. Divergence tests are every bit as challenging as convergence tests. "

Psychometric approach J. P. Guilford's group which pioneered the modern psychometric study of creativity, constructed several tests to measure creativity in 1967:

- Plot Titles, where participants are given the plot of a story and asked to write original titles.
- Quick Responses is a word-association test scored for uncommonness.
- Figure Concepts, where participants were given simple drawings of objects and individuals and asked to find qualities or features that are common by two or more drawings; these were scored for uncommonness.
- Unusual Uses is finding unusual uses for common everyday objects such as bricks. Remote Associations, where participants are asked to find a word between two given words (e. g. Hand ____ Call)
- Remote Consequences, where participants are asked to generate a list of consequences of unexpected events (e. g. loss of gravity) Building on Guilford's work, Torrance[45] developed the Torrance Tests of Creative

Thinking in 1966. [46] They involved simple tests of divergent thinking and other problem-solving skills, which were scored on:

- Fluency – The total number of interpretable, meaningful and relevant ideas generated in response to the stimulus.

- Originality – The statistical rarity of the responses among the test subjects.

Elaboration – The amount of detail in the responses. Social-personality approach Some researchers have taken a social-personality approach to the measurement of creativity.

In these studies, personality traits such as independence of judgment, self-confidence, and attraction to complexity, aesthetic orientation and risk-taking are used as measures of the creativity of individuals. A meta-analysis by Gregory Feist showed that creative people tend to be " more open to new experiences, less conventional and less conscientious, more self-confident, self-accepting, driven, ambitious, dominant, hostile, and impulsive. Openness, conscientiousness, self-acceptance, hostility and impulsivity had the strongest effects of the traits listed. Within the framework of the Big Five model of personality some consistent traits have emerged. Openness to experience has been shown to be consistently related to a whole host of different assessments of creativity. Among the other Big Five traits, research has demonstrated subtle differences between different domains of creativity.

Compared to non-artists, artists tend to have higher levels of openness to experience and lower levels of conscientiousness, while scientists are more open to experience, conscientious, and higher in the confidence-dominance facets of extraversion compared to non-scientists. Creative innovation might

require co activation and communication between regions of the brain that ordinarily are not strongly connected. Highly creative people who excel at creative innovation tend to differ from others in three ways:

- They have a high level of specialized knowledge, They are capable of divergent thinking mediated by the frontal lobe.
- And they are able to modulate neurotransmitters such as norepinephrine in their frontal lobe. Thus, the frontal lobe appears to be the part of the cortex that is most important for creativity. In 2005, Alice Flaherty presented a three-factor model of the creative drive. Drawing from evidence in brain imaging, drug studies and lesion analysis, she described the creative drive as resulting from an interaction of the frontal lobes, the temporal lobes, and dopamine from the limbic system.

The frontal lobes can be seen as responsible for idea generation, and the temporal lobes for idea editing and evaluation. Abnormalities in the frontal lobe (such as depression or anxiety) generally decrease creativity, while abnormalities in the temporal lobe often increase creativity. High activity in the temporal lobe typically inhibits activity in the frontal lobe, and vice versa. High dopamine levels increase general arousal and goal directed behaviors and reduce latent inhibition, and all three effects increase the drive to generate ideas. Creativity and positive affect relations

According to Alice Isen, positive affect has three primary effects on cognitive activity: •Positive affect makes additional cognitive material available for processing, increasing the number of cognitive elements available for association; •Positive affect leads to defocused attention and a more

complex cognitive context, increasing the breadth of those elements that are treated as relevant to the problem; •Positive affect increases cognitive flexibility, increasing the probability that diverse cognitive elements will in fact become associated.

Together, these processes lead positive affect to have a positive influence on creativity. Barbara Fredrickson in her broaden-and-build model suggests that positive emotions such as joy and love broaden a person's available repertoire of cognitions and actions, thus enhancing creativity. According to these researchers, positive emotions increase the number of cognitive elements available for association (attention scope) and the number of elements that are relevant to the problem (cognitive scope).