

## Through Behavioral Reconstruction Therapy, Increase the Capability of Creative Thinking

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### ABSTRACT

deal of information. This research illustrates how Conley, who has poor learning motivation symptoms, was helped by his counselor to improve his creative thinking. The technique used is a natural experiment in which experimental groups employ the Cognitive approach to Counseling Behavior and control groups employ interactive learning. The use of cognitive counseling behaviors aims to encourage counseling by manipulating, managing, and converting information in their memory so that counselors can quickly and rapidly produce ideas and reasoned and critical thinking, enabling them to approach the problem imaginatively. This research focuses on practicing counselors who have mastered cognitive-behavioral treatment concepts and techniques.

This research issue will be investigated using the author's proposed four-round behavioral modification strategy. First, behavior reduction and deletion; Second, behavior enhancement via positive and conditioned reward; Third, the construction of new behaviors; and fourth, the development of behavior resilience through the reinforcement of schedules. The desire to comprehend symptoms to improve his creative thinking. The technique used is a simple experiment, with experimental groups using the Cognitive approach to Counseling Behavior and control groups employing interactive learning.

Cognitive therapy techniques are meant to promote Conley manipulating, regulating, and modifying facts in their memory so that counselors may rapidly and easily generate concepts and apply logical and critical thinking to creatively solve issues. This study focuses on licensed counselors who have mastered cognitive-behavioral therapy ideas and practices. Within the author's suggested paradigm for behavioral change framework, this research issue will be explored in four rounds. First, behavior reduction and elimination; Second, behavior enhancement via positive and conditioned reinforcement; Third, the construction of new behaviors; and fourth, the establishment of behavior resilience through the support of routines.

**Keywords:** Creative Thinking, behavioral modification, cognitive behavior.

### 1. INTRODUCTION

Education is represented by the torch of knowledge. However, according to Albert Einstein, "imagination is more vital than knowledge" (1). In recent years, the phenomenon of the revolution of the 4.0 sector has been thoroughly studied in terms of how it encourages people's creativity in the digital era. The core of art, science and everyday life is creative thinking (2). According to Christian Natamado Simanullang's presentation at hcolleaguese, people engage in a variety of tasks without understanding their purpose. According to him, every person should adopt a strategic approach to obtaining and planning for all of his ambitions, one of which entails critical thinking beyond the limits of creative thought and reasoning beyond what other people anticipate.

Government officials and the education community are now emphasizing the significance of creative thinking. Educational practitioners appear to overlook even "creative Imagination." Perhaps instructors believe that creativity and general intellect are equivalent, that schools cannot or should not foster creativity, or that they do not know how to teach creativity (Sternberg 2003). Thinking creatively is a kind of creativity (Webster, 1990). Creative thought is a unique thought that turns the basic ideas drawn from apparent facts into concepts with a sustained intensity (Newell, Shaw, & Simon, 2011). The act of creating alternative solutions to a problem called creative thinking. Different perspectives are important for creative thought. The creative mind observes what others see but thinks uniquely about it(3).

Between the ages of seven and eleven, humans develop the ability to reason about events encountered and seen in the surrounding world. While adolescents aged 11 are regarded more abstractly, logically, and idealistically, adults are perceived more abstractly, logically, and idealistically(4). According to Piaget's theory of cognitive development, the mind is the most important component in the development of learners' cognitive capacities during the learning process. A school counselor tasked with providing counseling services at the elementary and secondary school levels must have a thorough understanding of the cognitive development of the participants. With this understanding, counselors must give innovative services to help in the fulfillment of student development duties. A component of the service is mending the behavior of kids with a low desire to study in order to boost their creative thinking.

The reconstruction of behavior or behavioral modification is a method for altering human behavior via the application of the Learning Principles(5). The behavioral modification applies to humans, the learning process, or psychological concepts derived from the experiment's findings. According to (6), behavioral modification is the systematic application of conditioning to human conditions in order to induce changes in the frequency of behavior or activities that affect the environment of such behavior. From this perspective, the eTeknikoperand movement may be used to reconstruct behavior or modify behavior. Precisely, the reaction, consequences, and stimulation are executed in a regular and scheduled manner.

For behavior modification, cognitive behavior therapy was utilized as a treatment approach. Conduct that provides learning objectives results in behavior as a result of the learning process. Behavior is observable and quantifiable by those who do not engage in it, including instructors and other students. However, conduct may also be categorized as a distinct phenomenon of an individual that cannot be immediately witnessed via the eyes of others or is concealed from view (overt behavior). Learners with low levels of learning motivation may be identified by their inattentiveness during class, failure to pay attention while instructors explain topics, etc. Similarly, an action that cannot be immediately witnessed is a manifestation of thought or emotion recognized by the perpetrator.

The poor learning motivation behavior belongs to the category of exaggerated behaviors, indicating that the behavior is excessive and can be immediately witnessed in its presence. In addition to inappropriate behavior, there is also behavior deficit or too little activity. Rarely do individuals exhibit deficit conduct? However, the impact lingers and may encourage a person to fall into such a routine. The labeling of pupils as having insufficient desire to study has prompted research on ways to address these issues. Students with adaptive behavior that results in a low willingness to learn must be offered a self-improvement program in light of the observable and observable phenomena. It seeks to mold the desirable and necessary behaviors for pupils to fulfill their responsibilities for growth. An example of a behavior alteration is a well-executed task.

## 2. METHODOLOGY

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This study included quantitative methods and experimental research designs (experiments). The design empirical study with the group Experiment Design makes use of cognitive counseling behavior and group control through interactive learning tactics. In Group Control, the class group with the highest effective learning motivation presentation is offered therapy. The subjects of the experiment groups are determined by natural selection, although this study is limited to students from other class groups with poor learning motivation. In other words, this research used purposive sampling to pick its participants. The design empirical study using the group Experiment Design employs cognitive counseling behavior and group control via the use of interactive learning methodologies. In Group Control, treatment is provided to the class group with the most effective learning motivation presentation. The subjects of the experiment groups are determined by natural selection, although this study is limited to students from other class groups with poor learning motivation. In other words, this research used purposive sampling to pick its participants.

The evaluation of motivational learning assessments must include an adequate examination to establish whether pupils have learning motivation issues. In addition, we have seen pupils exhibit a passive and sluggish disposition while listening to instructions. Students learning outcomes may also be utilized to select this research topic. The evaluation findings are then used to determine pupils' desire to study should be enhanced.

Utilizing motivational assessment research surveys, student motivation study observation guidelines, student learning documentation study, and evaluation of creative thinking skills as data collection techniques. In

addition, data analysis techniques use the nonparametric statistical T-test. Using a comparison of pre- and post-Examine results, this approach evaluates the effectiveness of the mean score on students' learning motivation and creative thinking skills (see Picture 1.)

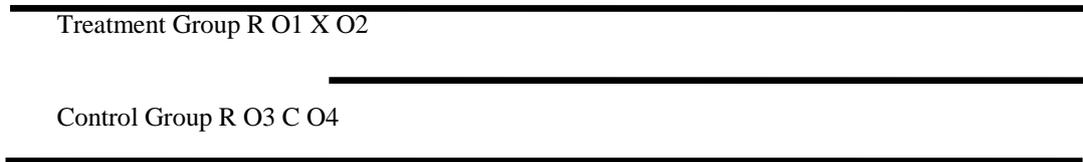
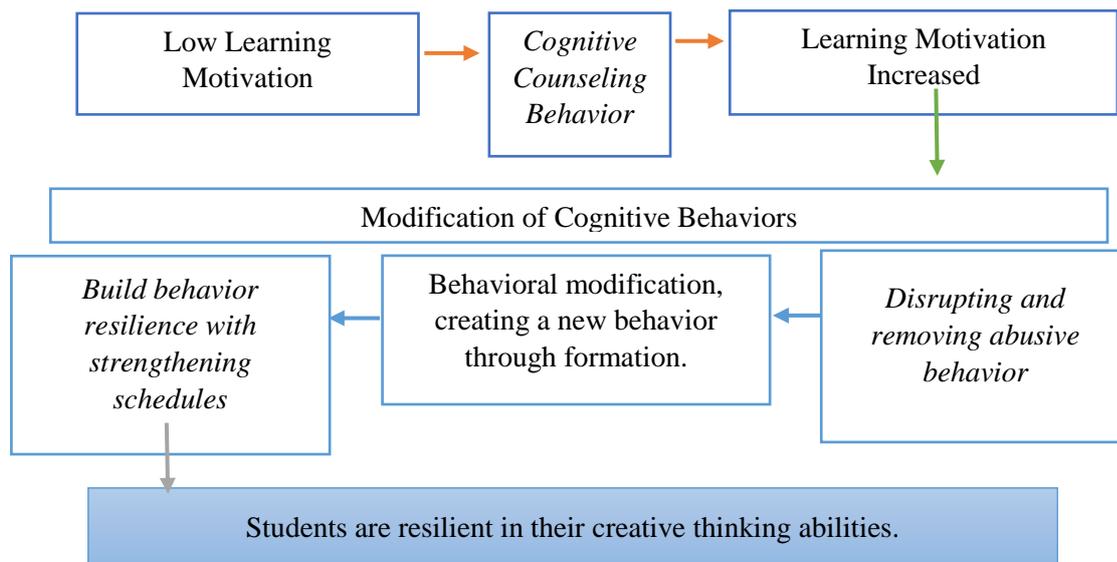


Figure 1. Experimental design using a pretest-posttest format and a control group.

- R: Subjek (Purposive Sampling)
- X: cognitive counseling therapy Behavior C: Interactional Learning Intervention
- O: Initial evaluation or observation of pre- and post-tests (Assessment of Creative thinking skills and Motivation Assessment Study)
- O1: Pretest administered to experimental groups
- O2: Test results for the experimental group
- O3: Pretest administered to the control group
- O4: Post-Test on control group

The first phase of pEndekatan treatment is an evaluation of the student's mental health utilizing a behavior-cognitive therapy approach to examine her life in terms of the learning benefits and relevance of school. The condition is defined as the student's response to him. In the second step, students with low levels of learning motivation are taught that their erroneous ideas are false via behavior therapy using the operant conditioning method.

Operant conditioning enables therapists/counselors to modify the behavior of those problems to be more meaningful; consequently, the respondent will be brought to have a high motivation for learning so that the formation of new behaviors are later contemplable and can be augmented by critical thinking. The disadvantage of this method is its length, yet it may successfully improve pupils' creative thinking over an extended time. (7) Conditioning operand approaches enable pupils to repeat the same action when they get a favorable response to it (see Picture 2).



Picture 2. Stage design Counseling for the mind the conduct of experimental groups.

### 3. RESULTS

The results of the SPSS 23.0 T-test revealed that the average pre-test score on a study of student motivation was  $t = 2.544$ , and Sig. (2-tailed) equal to 0.012 and a significant level of 0.05 representing the corresponding level of significance (5 percent). The significance value does not represent the initial ability of the student in the control group of the Experiment column. The test results suggest that the treatment circumstances may reflect the pre-Test study motivation of the control and experimental groups of students.

I provide three treatment sessions to the control group for interactive learning and to the experimental group for cognitive counseling behavior. The average student motivation increased by  $t = -4.542$  with a sig (2-tailed) of 0.001 at a significance threshold of 0.05, indicating a major change in both groups (5 percent). This demonstrates that the treatment between the experimental and control groups has greatly improved and their scores are not statistically different. For effective test results between the two groups, data from the pre-test and post-test are examined using gain score analysis. The results are shown in Table 2.

Table 2. Data Display test result Gains score cont

No	Value	Group			
		Control		Experiment	
		Pre-Test	Post-Test	Pre-Test	Post-Test
1	Lowest value	112	118	112	127
2	Highest value	167	178	152	177
3	Average	127.5	138.09	131.51	148.37
4	Gain Score	0.164	0.278		

The gain values of the control and experimental groups are similar, as shown in Table 2. The results of the gain score test reveal that cognitive behavior therapy and creative learning are equally effective in enhancing students' learning motivation. According to the researchers, the lack of statistical significance between the control and experimental groups is the consequence of equally successful treatment techniques for boosting student learning motivation. Nonetheless, after six months of monitoring and retesting, the treatment strategy in the control group is inconsistent across time. Concurrently, the experimental group has a reliable time consistency. According to the researchers, this is due to the fact that the experimental group's treatment has established a habit that allows it to occur without a trigger or negative reinforcement.

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### 4. DISCUSSION

Creative thinking, according to his study, is the potential to recombine or rearrange thoughts via certain creative thinking patterns, such as painting landscapes, building new scientific equipment, or producing new ideas(3). Innovative Thinking skills are either the result of divine favor or the result of human effort. Such a talent requires time and the careful application of learning principles to develop (5).

The results indicated that cognitive coaching regularly improves students' creative thinking skills over time. One reason is that cognitive counseling behavior comprises a pattern of handling and treatment that encourages the repetition of good behavior and reduces problematic behavior. Below is a scientific explanation based on operand conditioning Teknik(8–11).

Behavioral modification is a systematic endeavor that uses learning concepts and methods to examine and modify observable or unobservable behavior. The behavioral alteration Seven essential qualities define the field (7). First, the attention to issues in problem-solving in India may be quantified in a particular method. Second, behavioral modification entails manipulating factors to alter the individual's daily life environment. The region in this study is a learning environment, that is, an adaptable and inventive learning atmosphere. Thirdly, behavioral transformation is an enterprise that can be fully and precisely described. In this case, school counselors changed the conduct of students by using a cognitive counseling behavior strategy; Fourth, tactics for behavior modification may be directly undertaken by problematic persons or children(12).

Fifth, behavioral Modification approaches are created based on extensive study and a test-driven methodology. Sixth, the adjustment of conduct must result in a measured and predictable change in behavior. In building an effective learning environment, the seventh step is to collaborate with all relevant stakeholders, which in this instance include the teacher's subjects, school employees, and school curriculum bodies(13). Using behavioral evaluation, a counselor must identify how a student's conduct must be changed. In this instance, the assessment of the student's behavior might be substituted by a measurement of the student's learning motivation.

Fifthly, behavioral Modification approaches are created using a test-driven methodology and extensive study. Sixth, the behavioral alteration must produce a quantifiable and predictable change in behavior. The seventh step in building a positive learning environment is collaborating with all relevant parties, including the teacher's subjects, school employees, and curricular bodies(14). Using behavioral evaluation, a counselor must identify how the student's conduct must be adjusted. In this instance, the assessment of the student's behavior might be substituted by a measurement of the student's degree of learning motivation.

This method is often referred to as Pavlov's classical conditioning. The classical training of Pavlov spurred experimental research in behavioral theory, which we today refer to as behavioral therapy or behavioral therapy. Consequently, B.F. developed this behavioral therapy. Skinner used a technique known as Operant Conditioning, which emphasized behavior modification based on consequences (Reinforcers and Punishers). Positive reinforcement, negative reinforcement, and punishment are the basis of Skinner's method(15). Reinforcers are environmental responses that raise the probability that a behavior will be repeated. This is either a positive reinforcement or negative reinforcement treatment. It is possible to reduce the possibility that the conduct will be repeated, despite the fact that Punishers are an environmental response. The purpose of this treatment is to reduce undesired behavior.

Albert Ellis contends, based on the cognitive approach to behavior, that erroneous thought may result in a variety of uncomfortable emotions. Ellis's technique is built on diminishing irrational thought by reinforcing logical self-statements(2). Cognitive treatments, also known as Term behavior, and actual Cognitive Therapy, are ways of detecting maladaptive behaviors and changing them with adaptive behaviors; dysfunctional thinking may lead to depression and other difficulties (6,8,16). Cognitive Behavioral therapy is not only beneficial for training a child's habits or overcoming a person's phobias, but it can also be used to treat issues such as lack of self-confidence, depression, lack of learning motivation, learning disorder, and improvement of creative thinking and other abilities (16).

The counselor's function in cognitive behavioral therapy is to offer instructions, particularly in assigning Conley the task of thinking clearly. At the same time, the Conley play allows counselors to practice the skills they have been taught autonomously. Cognitive behavior enables people to adapt and modify their behavior independently. There are three main methods of cognitive behavior therapy: REBT (Albert Ellis), cognitive behavior therapy (Beck), and a change of cognitive behavior (6,17).

The REBT counseling technique is based on the premise that persons can act logically and irrationally. Rational conduct is seen as desirable, while irrational activity is viewed as disruptive and hindering. According to Ellis, illogical action behaviorkingbehavior king that results in the human feeling issue. Individuals with irrational disorders have erroneous assumptions about themselves. REBT holds that every person is born with the ability to be rational but may also become illogical, even though individuals can comprehend, reason, and conduct typical conduct(16). REBT encourages role-playing, affirmation exercises, humor, operant conditioning, as well as any other support that might be of use to Conley. REBT maintains that Conley's problem derives from an unrealistic, illogical, and self-destructive outlook. R reasoned theoretically and practically that a treatment that promotes Conley to have logical thoughts might limit Conley's irrational thought pattern. Conley's pattern of irrational reasoning. The REBT method highlights the influence of ABC on individual personalities. A is the present occurrence, B is the conviction, and C is the emotional and behavioral response to the experience(16).

Cognitive Treatment Aaron Beck is associated with aggressive, focused, time-limited, and coordinated Fairfield field REBT procedures (16). Cognitive therapy focuses on identifying and altering unhealthy ideas and behaviors. Beck's technique is based on how people feel and behave, which is determined by how they build their experience. Beck's principal premise focuses on how individual cognition might limit the reaction to stimuli or thought flow that can lead to rage (16). Cognitive therapy suggests that consciousness greatly impacts our perceptions and actions. Cognitive Treatment Beck contends that psychological issues occur when individuals adopt the wrong viewpoint. To disrupt this cycle, the ineffective and dysfunctional Way of the Mind must be altered (8,16)

To disrupt this habit, it is vital to alter the ineffective and maladaptive Way of the Mind (8,16). Before a change in behavior can occur, cognition must be distorted, which means that the person must be conscious of how they think, perceive, and behave, as well as their impact on society. The confrontation with irrational cognition is the major contrast between the ideas of Meichenbaum and Ellis.

However, Meichenbaum's method encourages more excellent reflection in self-teaching individuals to become conscious of the words aimed at them. His strategy is to teach Conley how to adapt the information he supplied so they can deal with difficulties more effectively. His primary focus is teaching practical techniques for dealing with troublesome circumstances such as impulsive and aggressive conduct, exam anxiety, and public speaking anxiety. Cognitive reconstruction plays an essential part in Meichenbaum's therapeutic technique by offering a briefing against the Conley to establish the orientation of the mind(18).

How does Meichenbaum's method alter behavior? Changes in behavior are mediated by a series of processes, including the interplay of internal words, cognitive structures, behaviors, behaviors, and the consequences of conduct. Self-observation, or learning to monitor their actions, is the first phase. Konsole is urged to recreate positive concepts in his mind to develop a novel approach to problem-solving. Phase 2: Initiating a new internal dialogue from the previous phase, Conley was urged to identify his maladaptive behavior as a chance to uncover adaptive behaviors that would continue the direction of behavioral, cognitive, and practical adjustments. Conley's third phase involves acquiring new talents. Conley is geared around developing problem-solving abilities that may be used in the real world. In addition, students are urged to continue concentrating on new self-directed activities and to be able to assess their actions. Consistency is contingent on what they have done to alter their behavior and its consequences (19).

A positive reinforcer is an event that, when presented immediately after a behavior, enhances its frequency. Positive reinforcement is defined as offering a reward. According to Skinner, anybody who performs a certain action at a given moment and receives positive reinforcement is likely to repeat that behavior when presented with the same situation. When every effort made by a person is met with a favorable response, plants will repeat that behavior. KEJadianCanadian This may improve behaviour in other situations (6).

Positive reinforcement refers to situations that increase a response when they are introduced or administered in response to earlier reactions. Therefore, a new program is necessary to develop the resilience of these habits. A good stimulus increases the effectiveness of positive reinforcement. During the period of negative reinforcement, the reaction improves due to the lack of negative incentives. Intensifying the positive stimulus will improve the individual's rate of response; hence, supplying the incentive will increase the frequency of responses (20)

Researchers observed that a positive reward for learning motivation has a significant influence on the creation of new behaviors, such as the capacity for creative thought. Researchers also think that teaching and learning tools and teaching techniques for engaging learning may improve students' learning motivation, but in this case through reinforcing the behaviors that emerge from enhanced learning motivation. The availability of infrastructure and instructors will limit a student's alternatives; hence, when the stimulus is withdrawn, the activity will end. This contrasts with behavioral modification treatment, which emphasizes the psychological structure of behavior and may affect the consistency of the pupils.

There are eight factors that affect the outcome. Positive reinforcement is influenced by eight factors (7): a) Identify the behaviors that will be enhanced; (b) Select boosters; (c) The cultivation's operation; (d) The amplifier's size; (e) Instructions (detailing the rules); (f) The amplifier's coolness; and (g) Whether the amplifier is dependent or not. Replace therapy in the program with scientific supplements. When a positive reinforcement is withdrawn, even once, the individual's behavior reverts to its initial condition prior to reinforcement.

Even recently developed habits are susceptible to reduction or elimination. Typically, undesirable or pleasurable behaviors are removed or diminished. The technique for reducing or eliminating such conduct (extinction) and the punishment are both referred to as the procedure for reducing or eliminating the behavior.

The Extinction process is a way of decreasing undesirable behavior by eliminating positive and negative reinforcement. This technique comprises eliminating the reinforcement that has been consistently applied at a certain level of Behavior (6,16,21).

The elimination and reduction technique aims to reduce obsolete practices that inhibit personal growth. This elimination strategy is a component of the learning principles implemented systematically with a consistent and continuous time pattern. According to the findings of this study, the negative behavior that seems to inspire youngsters to learn is small. As a consequence, the conduct diminishes creative thinking and should be limited or removed as a learning motivation. Learning motivation influences students' creative thinking; when learning motivation is high, students are more motivated to actively generate new ideas and concepts in the classroom (22). The confirmation and elimination of behavior cannot be performed alone by a therapist or counselor; all existing components, including parents, friends, teachers, subjects, and curriculum creators, must be considered (16).

Positive reinforcement is a strategy for establishing new behaviour. Nonetheless, this behavior will only occur seldom. If we wanted to form new habits, it would be challenging, since the desired behavior occurs only on rare occasions. At this stage, the method "formation" may produce a behavior that was not before shown(7). Modifying This "shaping" strategy of modifying the treatment begins with rewarding a response that previously occurred with a greater frequency and a frequency equal to that of the desired habit.

Positive reinforcement is one method for inducing new behaviors. However, these recent actions will only occur occasionally. It would be difficult if we wanted to establish new habits, yet the desired behavior only sometimes occurs. At this stage, the "formation" technique may be used to create a new behavior that has never been triggered before (7). Modifying the treatment using this "forming" technique starts with reinforcing a response that initially appeared with a more significant frequency and a minimum frequency equal to that of the desired behavior.

The reward obtained by Conley will hasten the formation of the target behavior. Researchers think using conditioning techniques for contemplation will hasten the construction of the predetermined target behavior. After Conley develops an interest in learning, it is desirable to emphasize the development of creative thinking abilities as a goal. This creative thinking ability results from the therapist's/use counselor's innovative thinking training approach. With unrepeated habituation, positive reward, and suitable negative reinforcement, it is possible to attain this desired behavior.

When learnt behaviors have been acquired and mastered, they must be retained as soon as possible. Building behavior resilience is a method for establishing these behaviors as the new identity of the person. The creation of a reinforcement schedule is one technique for promoting behavior resilience (7). Regular teaching at the proper intervals is the most easy method for maintaining behavior. In addition to rewarding newly learned behaviors, training may be used to increase their resilience. Therefore, maintenance must be performed consistently, even after the treatment or counseling procedure has concluded. Continuous reinforcement is its formal name (CRF: constant reinforcement(7)

The dual creative thinking abilities that humans possess must be maintained. The detainment phase of this habit is reinforced by predetermined scheduling. Maintaining a previously acquired practice has several benefits, one of which is enduring. After six and a half months of therapy, the control group demonstrated a decrease in motivated learning, indicating that new behaviors were only formed when the stimulus was presented. When the trigger is removed, Begitu's previous behavior will resume. The results demonstrated that physical stimulation alone could not control the student's conduct. But should be bolstered by the push and promotion of emotion and Psikologies. The Psychological Stimulus of cognitive learning habituation enables pupils to persevere longer with new actions.

## CONCLUSION

In the 4.0 industrial age, it is necessary to emphasize the significance of creative thinking. Individuals are encouraged to survive the capitalist era by using their creativity due to the era's evolution toward the creative industry. Consequently, those who cannot keep up will be left behind and submerged in the expanding mania era's growth. Creativity is the offspring of continual learning and habitual behavior. Forming it needed a methodical and exact approach. Students with inadequate creative thinking abilities were given behavioral modification approaches that substantially influenced the creation of new behaviors and the formation of new behaviors.

Even after the therapist/counselor ceases treatment, students/Conley continue to engage in behavioral modification therapy, indicating that the new behavior has become prevalent and entrenched in students/ The Conley. After six months of treatment (stimulus) cessation, the difference in the reinforcement of different other behaviors between the control and experimental groups demonstrates this point. It indicates that the new behavior created as a result of behavioral modification therapy is already a part of the student's or contemplative's conduct.

Behavioral modification treatment for developing positive thinking abilities in individuals with poor learning motivation may be accomplished with various factors. I.e.:

1. They are administered by licensed therapists/counselors with in-depth knowledge of behavioral modification treatment procedures.
2. Professional therapists/counselors who are well-versed in behavioral modification treatment approaches provide these services.
3. Consider an extended and continuous period.
4. Self-Conley must be consciously available for counseling (behavioral contracts).

### **AUTHORS' CONTRIBUTIONS**

Meisie L. Mangantes, is the first author as well as the lead researcher in this article. Mint Husen Raya Aditama, is the second author and correspondence writer in charge of compiling research reports on articles until they are published in scientific journals.

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