

## Application of modeling techniques to improve self-efficacy in female student

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### ABSTRACT

Subject a 12 years old female student. Subject complained of often playing truant, looking inferior when in class, often not answering teacher questions, and not easy to get along with all friends. Assessments were carried out on the subject using observations, interviews, psychological tests and self-efficacy questionnaire. The subject gives up easily when faced with a problem. This shows that the subject's self-efficacy is low. The interventions used to improve self-efficacy in the subject are modeling techniques. After the intervention, the subject can survive and try to do the work in school. The subject's anxiety and worries about difficulties at school diminishes and the subject no longer feels that she is not capable. The scale self-efficacy score subject's increased after the intervention. This shows that the used of modeling technique is successful in increasing self-efficacy in the subject.

**Keywords:** *Self-Efficacy, Children, Modeling, Students*

Self-efficacy is a person's beliefs about the ability to exercise some form of control over one's own functions and to control the events in their environment. Bandura also describes self-efficacy as a determinant of how people feel, think, motivate themselves, and behave (Feist & Feist, 2009).

Schunk (1984) said that self-efficacy is very important role in influencing the effort done so that it will affect how strong the individual effort is in predicting success that will be achieved. Self-efficacy can lead to different behaviors among individuals with the same ability because self-efficacy affects choices, goals, problem solving, and persistence in trying (Judge, Erez, Bono, & Thoresen, 2002).

Someone with high self-efficacy believes that they are able to do something to change the events around them, while someone with low self-efficacy considers themselves basically

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unable to do everything around them. In difficult situations, people with low efficacy tend to give up easily. While people with high self-efficacy will try harder to overcome existing challenges. The feeling of self-efficacy plays an important role in overcoming motivation to complete challenging work in relation to achieving certain goals.

Self-efficacy which is a habit of self-confidence can be obtained, changed, enhanced or reduced, through one or a combination of four sources; performance accomplishment, vicarious experience, social persuasion and emotional generation (Bandura, 1971). The behavioral indicators of individuals who have low self-efficacy as stated by Bandura are passive, avoiding difficult tasks, developing weak aspirations, focusing on their own weaknesses, never trying, giving up and not getting excited, blaming the past for lack of ability, worry and stress because helpless, think of the reasons for justification of failure (Kreitner, Kinicki, & Buelens, 2002).

In this study, the subject has the behavior of avoiding the problems she faces because she feels she has an inability to solve them. The subject skipped school because she felt unable to do the work and take lessons. The subject also avoided her friends because she felt she was not liked by her friends. The subject also often goes out to play until the evening to avoid problems at home. The problem of low self-efficacy of the subject is caused by the parent of the subject who is not near the subject, so the subject does not get an example in undergoing every problem she faces every day. When unable to overcome the problems she experienced, then the subject will tend to behave maladaptive by avoiding things that she felt could not be passed.

The subject matter can be viewed through social learning theory. Basically humans have the ability to think and regulate or direct themselves so that they can control the environment and are shaped by their environment. The individual's behavior is learned through interaction with the environment, and the development of personality depends on that interaction (Hall & Lindzey, 1970).

Appropriate interventions for dealing with subject issues are modeling. Modeling which means to imitate, in other words is also a learning process by watching and paying attention to other people's behavior and then copying it. The results of modeling or imitation tend to resemble even the same behavior with the behavior of the person being copied. This modeling can be a very important part of the subject learning process.

### **METHODOLOGY**

Assessment was carried out to obtain information about the subject itself through

1. Interviews were conducted with the subject, the subject's family, and the subject teacher,
2. Observation is carried out to determine the subject's maladaptive behavior,
3. CFIT test to determine the level of intelligence of the subject,
4. SSCT to determine the subject's perception of the environment,
5. Personality tests in the form of DAP, BAUM, HTP to determine the subject's personality,
6. Self-efficacy Questionnaire for Children (SEQ-C) (Muris, 2001) to determine the level of self-efficacy subject's.

### **Diagnosis**

Based on the theory of self-efficacy from Bandura, the subject met the criteria for low self-efficacy problems. This is due to the poor quality of the subject's relationship with his family

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so that the subject does not get a good example from his family thus forming low self-efficacy problems.

### *Intervention*

Intervention used to deal with the subject is modeling. Modeling is learning through observation by adding or reducing observed behavior, generalizing various observations at once, involving cognitive processes. In this case the subject can observe someone who is used as a model to behave and then strengthened by copying the behavior of the model.

In modeling, the subject observes a model and then is strengthened to copy the model's behavior. Bandura states that learning that can be obtained through direct experience can also be obtained indirectly by observing the behavior of others and their consequences. According to Bandura the behavior changes that occur in modeling are due to imitation (Corey, 2009).

Certain social skills can be obtained by observing and copying the behavior of existing models. The disturbed emotional reactions that a person has can be removed by the way he observes others who approach the feared objects or situations without experiencing frightening consequences by the actions that they do.

The modeling technique is done by asking the subject to observe models that are appropriate to the age and gender of the subject. In its application, there are several stages in modeling, namely the observing stage, the retention stage, the reproduction stage, and the reinforcement stage and the motivation stage. Application of modeling is also done based on the factors forming self-efficacy, namely performance experience, experience, vicarious, verbal persuasion, and emotional arousal. The intervention was conducted in 5 sessions.

1. **Session 1: Establishing targeted behaviors** Therapist tells the subject that the subject must change her behavior that avoids the task, as well as negative thoughts about her who feel inadequate and the anxiety she feels when facing the tasks.
2. **Session 2: Setting the model** In this session the therapist explains to the subject that during the intervention the subject will imitate the model. So in this session a model is set up that is useful for giving examples of behavior on the subject.
3. **Session 3: Application Stage** At this stage, modeling techniques consisting of attention, retention, reproduction, and motivation are carried out by observing the model that has been determined and imitating the model so that the subject can understand what kind of behavior she should improve. To be able to increase self-efficacy can be done through performance experience, vicarious experience, verbal persuasion, and emotional arousal.
4. **Session 4: Evaluation** The next session is evaluation, where the results obtained by the subject are evaluated and whether the targets are met and the constraints experienced by the subject are identified.
5. **Session 5: Stopping the program** In this session the therapy is terminated by giving motivation to the subject and reminding the subject of his success in doing the task.

## RESULTS

The results of the intervention using modeling techniques on low self-efficacy problems with the target of increasing self-efficacy in terms of completing assignments in school on the subject is, the subject experienced an increase in self-efficacy which can be seen from several changes in the subject's behavior.

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The subject previous behavior was passive and never asked for help from others when it was difficult at school, after the intervention was done the subject dared to ask the teacher and her friends if it was difficult to understand or do the task, so that the subject did not give up easily when doing his assignments difficult.

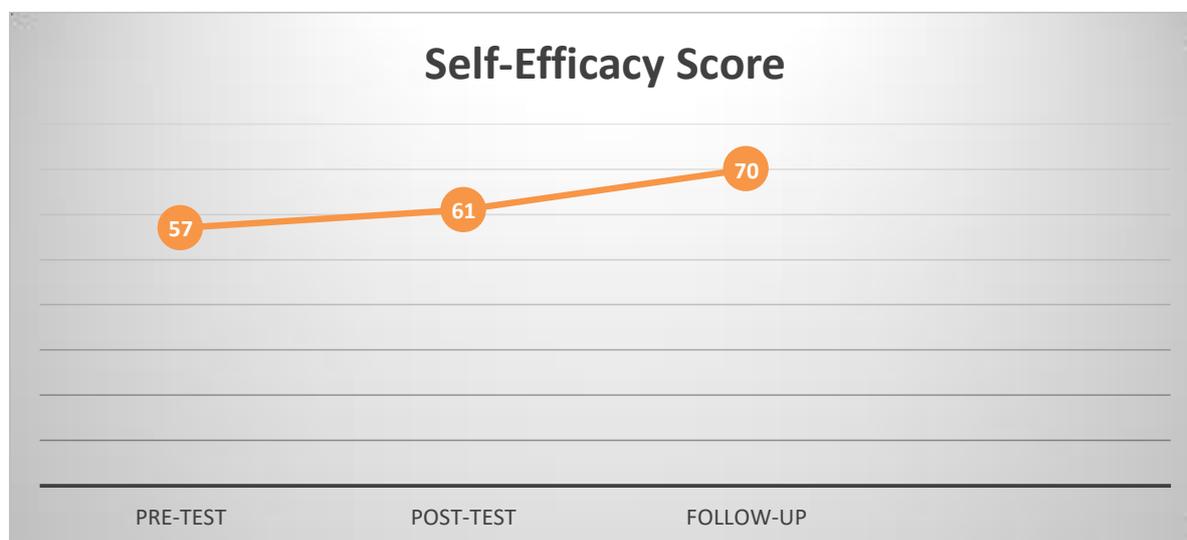
Subjects who before the intervention avoid tasks that are felt difficult by her, after the intervention is done, the subject still tries to do the task by asking friends or looking at the notes they have. Before intervention, the subject often thinks negatively about herself, the subject feels herself unable to do things in school, after the intervention is done, the subject feels herself the same as her peers and is able to do the task well because the subject has understood how to do a good job.

Subjects who have never previously tried to find solutions to her difficulties in doing the task, after the intervention was done the subject tried to find a solution when facing difficulties in doing the task, such as reading back notes and making a schedule to do the tasks to make it easier.

Before the intervention is carried out the subject is easy to give up and not excited when facing her duties at school. After the intervention, the subject does not give up easily when faced with a difficult task because the subject has a higher motivation caused because the subject has learned through the application of modeling and can practice it well.

Before intervention the subject often feels worried and anxious about things related to her schoolwork. The subject's anxiety and worries are reduced because the subject begins to find out and find a way so that she can do the task well, so that her anxiety about his school activities decreases.

In addition to the results of observations and interviews, the results of the success of the intervention through modeling techniques can also be seen through the scale of self-efficacy. Before the intervention was carried out, the subject got self-efficacy score of 57 which was in the low category. After the intervention was carried out, the subjects got self-efficacy score of 61 which was in the medium category. Increasing the score is an improvement in the intervention and is an indicator of the success of the intervention. The following graph displays a score of self-efficacy scale just before the intervention, post intervention and follow up.



*Graph 1.0*

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In addition to observation and interviews, at follow-up also measured using self-efficacy scale. At the time of follow up, the subjects got self-efficacy score of 70 which was in the medium category. The subject's score increased from the results of the post-intervention score that had been previously measured. From graph 1.0 it can be seen that an increase of 4 digits and 9 digits indicates that the subject's self-efficacy is increasing.

Increasing the score from the self-efficacy scale and also from the observations of behavior carried out as well as interviews with the subject showed that the intervention succeeded in increasing the subject's self-efficacy. In addition, the increased self-efficacy of the subject also had another positive effect on the subject, namely the subject being never ditching school, because her fear of learning which she said she could not do had diminished.

### **DISCUSSION**

The application of modeling techniques is successful in increasing self-efficacy, especially in terms of increasing self-efficacy of completing tasks. This can be seen from the success of the subject to display behavior that is in accordance with the target, which is not easily discouraged in completing assignments, asking and answering teacher questions, and completing assignments in a timely manner.

Self-efficacy in children can be improved through modeling techniques, especially modeling their peers. Modeling a friend can have a much better effect on a child to increase her self-efficacy. The child will observe the target behavior carried out by her friend and easily mimic it (Schunk, 1984). The modeling technique used is using a real model that is the subject's peer, so that the subject can easily observe the behavior of her model friends.

In several studies stated that the similarity of subjects with models in personality attributes such as gender and age and in perceived competence (skills, abilities) can increase the likelihood of observational learning (Bandura, 1971, 1981; Perry & Furukawa, 1980). In this intervention, the model used is a real model that is the same age as the subject and has the same sex as the subject. This similarity makes the subject can easily connect between the exemplary behavior with how the subject must imitate and perform the behavior in their daily lives.

Individuals tend to experience higher self-efficacy to do a good job when they observe other similar people who can succeed in doing their job (Bandura, 1981; Brown & Inouye, 1978; Schunk, 1984). This motivates the subject when she sees a model that can do his job well, so that the subject observing the model is confident that she will also be able to do or complete the task as well as the model she is modeling.

Modeling is often used to teach skills to children, and the belief that someone has learned skills can improve self-efficacy (Rosenthal & Bandura, 1978; Schunk, 1984). Modeling can also increase self-efficacy because it implicitly conveys to the observer that they are able to do the thing that is modeled (Schunk, 1984). Subjects learn through modeling, observing and learning the skills possessed by the model. When observing and learning this, the subject has confidence that she has new skills. These beliefs can then increase the self-efficacy of the subject.

When a task cannot be completed or seems difficult enough to complete so children with low self-efficacy will stop easily while those who feel more competent will survive because they believe they can master it (Bandura, 1982; Schunk, 1981, 1984). Subjects who observe the

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model, who can master their tasks, can after imitating what the model does will foster confidence in themselves in mastering the tasks given, so that the subject can survive with the tasks given to it.

Individuals who imitate the model make observations first. The individual can then describe what she observed in the model. The depiction of the thing observed is a learning measure for individuals where when individuals are involved in observing activities, individuals will also measure their abilities and try to equate their abilities with the abilities of the models that are observed and imitated (Fryling, Johnston, & Hayes, 2011). When the subject observes the model that is her friend, the subject is motivated to be able to behave similarly to that of her friend so that intervention through modeling techniques can succeed to improve the subject's self-efficacy.

Processes in modeling techniques help the subject to be able to observe well and then mimic the behavior of the model. The modeling process that is attention is a cognitive process that recognizes observed behaviors. Furthermore, the retention process is a process in which the observed behavior becomes a memory that can last a long time in the memories of individuals who are modeling. Furthermore, the process of reproduction is the process by which memories of the observed behavior are transferred in a real behavior that is similar to that of the model. Furthermore, the process of providing motivation is a determinant of whether the behavior that has been carried out clearly can last a long time and in a variety of situations (Fryling et al., 2011).

The process experienced by the subject through her experience involved in modeling, namely the subject can mimic ways so that the subject does not give up easily when completing a task such as by looking back at her notes. Furthermore, the subject can do her work on time because the subject gets a way of imitating the model she observes, namely by recording the target time of work on the task. The subject can do this because the modeling process is carried out several times, so that a good attention process occurs, then retention, followed by reproduction where the subject can imitate the behavior of the model significantly. Furthermore, the subject has a motivation that can maintain the new behavior learned so that the behavior of the subject can last long according to the results of follow-up that have been done.

### **CONCLUSION**

Interventions using behavioral approach through modeling techniques can successfully improve the subject's self-efficacy, especially self-efficacy in terms of completing tasks. Behavioral indicators that appear on the subject through post-intervention and follow-up measurements are that the subject has survived and tried when faced with a difficult task, the subject's anxiety about difficulties in school was reduced and the subject no longer felt that she was incapable.

While the measurement results through the scale obtained an increase the subject's score before intervention was 57. The subject's post-intervention score increased to 61 and the subject's score at follow-up was 70. The improvement in the results seen through the scale score and also through observation and interviews is an indicator of the success of the intervention with modeling techniques undertaken to improve subject's self-efficacy.

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### *Conflict of Interest*

The author declared no conflict of interests.

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