



# Anger Management Intervention with Cognitive - Behavioral - Spiritual Approach (SC-Spri) in Adolescents with Behavioral Problems

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**Abstract.** This study aims to determine the effectiveness of the SC-Spri intervention model in improving anger management skills in early adolescents. SC-Spri is an intervention model that combines cognitive-behavioral and spiritual intelligence. This study involved junior high school students with the characteristics of high reactivity, low ability to manage emotions, and have a tendency to engage in aggressive behavior. This study was conducted with one-group pre-test and post-test experimental design consisting of three phases: baseline, intervention, and follow-up. The baseline phase was conducted to determine the basic ability of the subject's emotional management before attending the training. The intervention phase is in the form of training consisting of materials on building a healthy self-concept, emotional regulation using cognitive reconstruction techniques, developing social skills, and spiritual intelligence. In the follow-up phase, a posttest was conducted using a self-monitoring method using diary, behavioral observations at school by school counsellor, and an emotion management questionnaire with indicators of emotional irritability. Analysis of quantitative data using Wilcoxon nonparametric statistics showed a significant difference in emotional irritability between before and after the intervention ( $Z = -2.561$  and  $p < 0.05$ ) and indicated a decrease in emotional irritability after the intervention. Based on the analysis of qualitative data derived from open questionnaires, diaries, and observations of school counsellor, it was concluded that 60% of the subjects showed changes in their ability to manage emotions and there were more positive changes in behavior.

**Keywords:** Anger management · intervention model · cognitive behavioral spiritual approach

## 1 Introduction

Emotion is one of psychological aspects that has important roles in human life, both positively and negatively. The positive roles of emotion is to provide energy to carry out activities in life so that plans and ideals can be realized. The negative side of emotions happen when the emotional pressure is very high and uncontrolled, it will damage the joints of life which in general will explode and become aggressive behavior [1].

Anger is actually a healthy way to let go of negative thoughts and feelings. When anger is managed properly, then behavior will become positive, but if pressured and

handled negatively the anger can lead to aggression or rage. There are many cases of behavior with anger problem in adolescence. It is not uncommon for students to be expelled from class and even expelled from school, either temporarily (suspended) or expelled because of anger behavior. Students who have emotional problems with anger are often involved in delinquent behavior [2] and also violence [20]. Goleman also mentions that people who experience angry emotions can take aggressive actions such as violent tantrum hate furious irritated disturbed bitter angry offended hostile and violent.

Whitfield [3] suggests that children who experience chronic anger from an early age have a tendency towards violent behavior and will be resistant to treatment. Burney and Kamrey [4] also suggested that adolescents who have anger reactivity will be unable to cognitively process the signs in their environment. These adolescents have negative attributions toward themselves and their environment, have difficulty in solving problems, are easy to use physical acts when facing conflicts, and become hyperactive and impulsive. Lochman, Lampron, and Rabiner [4] stated that adolescents who have difficulty controlling angry emotions show signs of deficits in their cognitive processes, behavior, self-control and ability to overcome social problems.

Many concepts of anger management put more emphasis on dealing with emotions when they have already occurred. The best management of anger emotions is to prevent anger itself. Traditional anger management therapy is directed at dealing with the behavior after the anger flare has occurred. Models of coping with emotions that have been developed and researched use Cognitive - Behavioral approach. Two of the models are Rational Emotive Behavior Therapy developed by Ellis [5], and a management model, namely cognitive behavior modification (CBM) developed by Meichenbaum's [3]. CBM assumes that negative emotions (distress) are usually caused by maladaptive thoughts. CBM focuses on making clients more aware of their own thoughts and training to develop self-talk that allows them to deal effectively with problems in problematic situations [6].

Both models mentioned above does not involve an important aspect of the individual, the spiritual aspect. This is in line with Akande [3] who warns that one intervention approach is not suitable for everyone, and it is important to recognize that there are broader societal and cultural factors that influence adolescent control over their anger. Therefore, it might be surprising to find inconsistent findings regarding the long-term effects of Cognitive-Behavior Anger Management (CBAM) programs.

Emotional management intervention programs that focus more on the cognitive role in interpreting the stimulus, the self-concept and self-esteem factors are very influential in interpreting the stimulus, whether it causes awakening or not. As stated by Puskar et.al [7] that individuals with very high self-esteem have a tendency to be angry at a low level, on the other hand individuals who have low self-esteem have an anger score at a very high level.

Based on the explanation above, this study aims to determine the effectiveness of strengthening self-esteem, social skills, cognitive reconstruction and spiritual intelligence to improve the ability of adolescents to manage angry emotions more adaptively.

## 1.1 Anger

Novaco [8] suggested that anger arousal is an emotional response to provocation that is related to the cognitive and nervous system components. This cognitive component explains that anger is a negative emotion which is the result of subjective experience of a situation that is perceived as an unpleasant state [9]. Cognitive-behavior perspective assumes that anger is caused by maladaptive thinking patterns (referred to as distortions or cognitive deficits) that cover an individual's core beliefs about himself and his surroundings, and then trigger emotional and behavioral responses [10]. Such cognitive distortions include attribution bias, in which individuals misinterpret social situations [11]

Novaco [13] summarizes the opinion of Berkowitz, Feshbach, and Bandura who associate anger with aggression so that anger has the following functions: 1) Anger energizes behavior as a state of high arousal, increases response amplitude and serves to override inhibition. In this context anger serves to get rid of frustration; 2) Anger focuses attention on situational elements that pose a threat; 3) Anger expresses or communicates negative sentiments, to convey displeasure and to encourage conflict resolution; 4) Anger as a self-defense by maintaining social distance and suppressing fear, and also defends self-esteem by externalizing the attribution of blame for misfortune; 5) Anger potentiates a sense of control or personal empowerment, between social groups and individuals; 6) Anger encourages aggressive behavior.

## 1.2 Cognitive-Behavior Anger Management (CBAM)

Anger management aims to help reduce someone's anger. Joseph and McLeod [14] suggested that the goal of anger management is to reduce the emotional feelings and physiological arousal that cause anger. Gentry [15] argues that controlling angry emotions or also called managing angry emotions is to reduce emotional feelings and physiological behavior that causes anger to arise which can finally respond to it in a way that is acceptable to the surrounding environment.

Joseph and McLeod [14] citing The American Psychological Association website recommend strategies for managing anger such as relaxation, cognitive restructuring, problem solving, better communication, using humor, changing the environment, calming down, and assertiveness training.

Emotion management is the ability to cope with one's emotional reactions. People with this ability are able to regulate their emotions well. Erdoğan suggests emotional self-management, choosing and dealing with emotions in oneself and others, and using emotions to shape a healthy life are part of emotional intelligence [16].

How to manage anger is related to the individual's speed towards anger, the situations that trigger anger, and how the individual responds to anger, based on habits or learning outcomes. The so-called learning process itself is the result of biological makeup and life experiences and their combined impact on neuronal pathways in the brain. Thus, cultivating healthy anger management involves the adoption of new habits and commitments.

In the mind theory perspective, it is argued that individuals with anger management problems are very aware of how the mental states of others affect themselves but are often unaware of how their disordered anger affects the mental states of others [17].

Mauss. et.al. [18] proposes 2 models of emotional management, namely: 1). Process models. This process model focuses on cognitive emotion regulation. 2). Temporal models. The temporal model focuses on contextual antecedents (situation selection and situation modification), attention, judgment, and response modulation. Furthermore, Gross [18] suggested that this contextual antecedent has 5 strategies, namely situation selection, situation modification, attentional application, cognitive change and response modulation. This strategy has adaptive and maladaptive qualities that need to be evaluated with respect to the context [15].

Humphrey and Brooks developed an emotion management program with a cognitive-behavior approach that adapts the model proposed by Meichenbaum [10] and anger management from Novaco [8]. The model includes the following: (i) provides information about the cognitive and behavioral components of anger, (ii) teaches cognitive and behavioral techniques for managing anger, and (iii) facilitates the application of newly acquired skills. Specific skills that are more emphasized are relaxation, assertiveness, anticipation, self-instruction, self-evaluation, role playing or practice, and problem solving. In addition, participants were often encouraged to use logs, record envious situations and rate anger levels. The use of anger logs is often part of a cognitive behavioral approach to encourage such awareness, particularly with regard to understanding how thoughts can influence feelings and behaviors around anger. More specifically, this tool has been used to help foster cognitive restructuring - learning to identify and dispute irrational or maladaptive thoughts known as cognitive distortions, such as: thoughtless thinking or overgeneralization and attribution errors. In this way, logs help individuals recognize how an individual's assessment of a situation can play a major function in anger.

The models above do not include an important aspect of a person, namely spiritual intelligence.

### 1.3 Spiritual Intelligence

Zohar and Marshall [21] found that spiritual intelligence is the intelligence that supports IQ and EQ. Spiritual intelligence is the ability to access meaning, value, purpose in living a richer and more creative life. Another opinion was put forward by Raja [22] that spiritual intelligence represents a set of spiritual abilities and capacities whose application enhances adaptability and thereby improves individual mental health. Zohar added that individuals who have a high SQ will be able to think outside the box. And have humility [23].

Various studies have shown that spiritual intelligence has a negative relationship with depression, aggression, hostility, anger, anxiety, and self-affirmation. In addition, spiritual intelligence has a positive relationship with attributes of mood, social sensitivity, life satisfaction, energy, and activity [24].

## 2 Method

### 2.1 Experimental Design

The approach in this study is quantitative with an experimental design of one group pretest and posttest. The intervention program provided is an increase in spiritual intelligence, cognitive reconstruction, self-concept and social skills.

### 2.2 Intervention Program

This holistic approach in the emotion management intervention program means an intervention that does not only emphasize cognitive aspects. Humans have other dimensions, namely self-dimensions which include self-concept and self-esteem. Self-concept and self-esteem greatly influence the mind to interpret the stimulus. Another dimension is social. Many studies have found that adolescents who have emotional and behavioral problems show that they are less able to handle problems in social interaction, so that social skills must be strengthened. In this study, the social aspects that are enhanced are perspective taking and communication.

Stimulus processing in cognitive determines emotional arousal, therefore cognitive reconstruction must be carried out on adolescents who have emotional problems, especially anger and aggression.

Based on the concept above, the intervention program in this research is strengthening self-concept, self-esteem, spiritual intelligence; social skills and cognitive reconstruction of adolescents who are unable to manage emotions accompanied by behavioral problems. The intervention consisting of 4 materials:

*Material 1:* Building a positive self-concept

*Material 2:* Strengthening Spiritual

This material consists of four sub-materials :

- a) Self as a servant of Allah.
- b) Vision Development.
- c) The companion of meaning.
- d) Gratitude

*Material 3:* Cognitive Reconstruction (A-B-C model)

This material consists of 4 sub-materials, namely:

- a) Self-Emotional Awareness
- b) Recognizing Triggers.
- c) Cognitive Reconstruction

*Material 4:* Social Skills

This material consists of 2 sub-materials, namely:

- a) Perspective Taking.
- b) Communication.

### **2.3 Research Procedure**

The research was carried out in 3 stages: baseline, intervention, and follow-up stage. Baseline stage is the stage of measuring the initial condition of the ability to manage emotions and behavior problems. The intervention stage was given through an active learning method which consisted of providing material followed by exercises, sharing experiences in managing emotions among participant members regarding ways to deal with negative stimuli originating from their environment, among others, from friends. The training was carried out for 20 h, where the training was held on Friday and Saturday. For one week before returning to class, participants were asked to write down the emotional events they experience every day in a diary and how to solve them. In the following week, he returned to class, starting with a sharing session and discussion with other friends regarding ways to manage emotions, then continued with the provision of material. The follow-up stage lasts for 1 week after which posttest measurements are taken.

### **2.4 Participant**

The research subjects are junior high school students. The number of subjects as many as 10 people consisting of 3 men and 7 women. The sampling technique is purposive sampling with characteristics 1) very emotional. 2). Easy to get angry. 3). Aggression when angry. 4). Off task during class.

### **2.5 Measurement**

The measurement method for both pretest and posttest uses a questionnaire. A questionnaire to measure the ability of emotional management compiled by Novaco with indicators of emotional irritability and compiled according to a Likert scale model [25] In addition, an open questionnaire with hypothetical cases and self-monitoring was also used. Participants were asked to write down the emotional events they experienced in a diary for 4 days before meeting again in the next material. Assessments are also carried out by school BK teachers.

## **3 Result**

### **3.1 Pretest**

The pretest was carried out by measuring the ability to manage angry emotions as assessed by the Counseling Guidance Teacher which showed a). High in emotional reactions when faced with provocative situations. b). The inability to control emotions is followed by aggressive behavior, both verbal and non-verbal. c). Off task when in class during learning.

The subject was given an open questionnaire with a hypothetical situation and the subject was asked to enter into the hypothetical situation so that his emotions were provoked as follows:

**Table 1.** The trigger of angry emotion

No	Trigger situation	Place
1.	Being ridiculed by friends, being made fun of	school
2.	When the subject is doing something then friends tease	school and home
3.	Friends badmouthing behind the back/felt	School
4.	Humiliated At school and	Home
5.	Personal items opened for viewing	School and home
6.	Bullied	School

**Incident:**

*When I come home from school, the traffic is very heavy. Brother walking in a row on two motorbikes with your friend. Suddenly from behind someone else who repeatedly honked at you.*

Then the participant were asked questions about: a) emotions that arise in them. b) what causes anger

Based on the analysis of the subject's answers, it was found that 90% of the subjects were immediately provoked by their emotions, namely angry emotions. The forms of anger including the form of behavior: looking at the source of the emotion with a sharp gaze, getting angry by saying dirty words, wanting to hit the source of anger. Only 10% felt mild irritation. The situations that trigger the emergence of angry emotions can be seen in Table 1.

Angry emotions that occur in the subject are mostly stimulated by hot thoughts that appear automatically after the stimulus hits him. These stimuli are mostly provocative.

**3.2 Posttest**

After completing the training with 8 materials, repeated measurements were made. Measurement method with closed questionnaire and open questionnaire. An open questionnaire by presenting a hypothetical situation.

The results of the analysis of the subject's answers to responses to provocative situations still point to angry responses. For example the answer to the situation "while carrying a drink, suddenly his friend accidentally nudged him and the drink spilled and hit your uniform". Based on the answers, 40% of the subjects still show emotions with physical and verbal aggression such as: If you walk with your eyes instead of using your knees, and keep nagging, "where are your eyes", "you don't have eyes". 60% of the subjects with emotional reactions were calmer, and able to analyze the situation so that hot thoughts automatically did not appear and one person who used coping said as "I got bad destiny, just be sincere".

In general, the more calm reactions include "learning sincerely", "covering the answer so that it is no longer being copied", "moving seat" is the subject's response when facing the situation "When you know, a school assignment that has been made

**Table 2.** Difference between pretest and posttest

		N	Mean Rank	Sum of Ranks
Post Test - PreTest	Negative Ranks	8 <sup>a</sup>	5.50	44.00
	Positive Ranks	1 <sup>b</sup>	1.00	1.00
	Ties	1 <sup>c</sup>		
	Total	10		

a. PostTest < Pre Test

b. PostTest > PreTest

c. PostTest = Pretest

**Table 3.** Test Statistics<sup>b</sup>

	Posttest-Pretest
Z	-2.561 <sup>a</sup>
Asymp. Sig. (2 tailed)	.010

Based on positive ranks.

with difficulty is copied friends and was pushed from behind so that he almost fell on his way home from school. There was only one person (40%) who showed angry emotions such as “I was scolded, stabbed and beaten, I pushed back, Screamed and irritated. 60% (9 people) who have been able to show stable emotions and ways of coping with the situation by using their spiritual intelligence more.

The results of the BP teacher’s recording of daily behavior at the research subject school showed that 4 (four) subjects who still showed emotional behavior when faced with provocative stimuli even 1 (one) person among these 4 (four) subjects carried out aggressive behavior and received suspension.

The second data is quantitative data from a closed questionnaire based on a Likert scale. Data analysis used non-parametric Wilcoxon statistics with the help of SPSS. Wilcoxon test is used to analyze paired observations of two data. Whether or not it differs from the interval or ratio data, but the data does not follow a normal distribution. Because N (number of subjects) is small, it can be assumed that the distribution of the data in this study is not normal.

The results of the homogeneity assumption test on the results of the study showed  $p < 0.05$  which means that it is not homogeneous. The results of Wilcoxon’s analysis are as shown in the Table 2.

Based on the data in Table 3. The significance value = 0.010, which means  $p < 0.05$ , it can be concluded that there is a significant difference in emotional management ability which is marked by a decrease in emotional irritability between before participating in training to strengthen spiritual intelligence, cognitive reconstruction and social skills and after participating in the training.



## 4 Discussion

This study uses a socio-cognitive and spiritual approach where subjects with the inability to manage emotions are given training by reconstructing thoughts so that they are able to attribution to stimuli correctly, do not experience distortion, are given training in social and spiritual skills. Based on the results of quantitative and qualitative analysis, it is proven that there is a change in behavior and the ability to manage angry emotions after being given social-cognitive and spiritual training and strengthening self-concept of self-esteem. This is in line with Covey's opinion [26] that spiritual intelligence is the central and fundamental of all intelligences so that spiritual intelligence becomes a source of guidance for other intelligences. Meanwhile, Wigglesworth [26] argues that Spiritual intelligence is the ability of individuals to behave in ways that are wise (wisdom) and full of feelings in order to maintain peace both within themselves and their environment. Based on this opinion, spiritual intelligence plays a very important role in easing hot thoughts when individuals face provocative stimuli. Likewise, the more positive the self-concept will correctly interpret the stimulus, cognitive reconstruction is intended to replace hot thoughts that are unreasonable and do not support the facts but are more dominated by negative thoughts, replaced with cold thoughts that are in accordance with the facts. The ability to change hot thoughts into cold thoughts is certainly greatly influenced by spiritual intelligence and a positive self.

However, there are still subjects who still show an angry response and tend to be aggressive after attending this training. In accordance with the data above in table 1. That the situations or sources of emotional awakening of the subjects of this study are situations that cause their self-esteem to be lowered. When self-esteem is lowered it will trigger aggression, where aggression is also an indication of anger (Baron and Byrne, 2000). Similarly, Deffenbacher (in Humphret And Brooks, 2006) argues that anger occurs when "events are judged to involve a violation of personal domains, insults to or attacks on ego identity, violations of values and expectations, and/or unwanted interference with directed behavior. on purpose. Besides that, it is also greatly influenced by the level of seriousness in participating in the training. Subjects who still did not show changes in their ability to manage emotions and behavior showed not being serious during the learning/training.

The results of the evaluation of the implementation of this intervention program found several important things to consider if doing the same research.

- 1 Participant Readiness. If there is a lack of seriousness of research subjects in participating in the training, it will greatly affect the results.
- 2 The seriousness of the subject is strongly influenced by the intention to participate in this program. Subjects are not chosen but it is better if they participate in this program on their own accord because there is a need to overcome the problem of angry emotions.
- 3 Escape (drop out). Participation in this program is not based on self-awareness of their emotional problems, so participation in the program opens a need for him. This study initially followed by 20 students but until the end of the session only 10 students participated.

- 4 Changes in behavior as a result of the intervention cannot be known directly. Moreover, the learning method in this training does not use the observation learning method, so the impact of the training that emphasizes cognitive reconstruction takes a long time for behavioral changes to occur. At least 4 weeks of time needed to observe.

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