# Self-Regulation in Critical Thinking Skills of Buddhist Teenagers for Solving Problems in Indonesia

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#### Abstract

Teenagers are age-prone to new problems that arise in day life. In the face of problems in Buddhism, adolescents are taught to be independent from early adolescence to dealing with various problems in their lives. The adolescent in the Buddhist teenagers' has the independence ability taught in the Buddhist theory that "make yourself a protector for yourself", so that the individual is required to use his mind in conquering himself."

Self regulation is component of critical thinking skills as the ability to control ourself to solve the problem where in behaving need consideration using thought for making decision. Critical thinking skills is a thought process that includes the ability to interpret, analyze information, evaluate the problem, conclude for decision-making, and ends with self-regulation.

This study aims to identify qualitatively the representative of self-regulatory in critical thinking skills on the Buddhist adolescents in solving the problem. In the results of this study, the representation of self-regulatory of the Buddhist teenagers' critical thinking in solving problems uses independence and thinking systematically without instruction to solve the problems. This research is supporting theory about critical thinking that includes aspects of self-regulation and improvement of self regulatory can be started by group excercise.

**Keywords:** self-regulation, critical thinking skills, Buddhist teenagers', solving problems.

#### 1. Introduction

In the transitional period, adolescence is a developmental stage in which the individual experiences a troubled age. Problems in life can be said to be complex that includes personal, social, career, and learning issues. In Buddhism, every individual is taught to explore the law of cause and effect. The law of cause and effect reads, "Everything arises because of the cause of another condition, impossible without reason, and so on like a chain". The proverb says "who planted, he will reap". This is a common thing in everyday human life. In Buddhism, habituation is done in adolescents that live independently from early adolescence to face various problems in his life. The youth of the Buddhist community has the ability in terms of independence taught in the Buddha that "Make yourself a protector for yourselves". So every individual is required to use his mind to conquer himself. In this case, the ability of self-control, emotion, behavior is very important to do. In addition, the principle is also used to interact socially in everyday life especially in religious life because they live in one community that has the same belief.

In terms of believes, every single individuals has their own principle namely religious values which are embedded since the early age. This can be a foundation to do the daily activities, to face the problems which are confusing, and this might bring negative behaviour to teenagers. In Indonesia, juvenile delinquency is one of the impacts the ability of self-regulation towards teenagers whose low category and the decision which is not based on the religious values and critical thinking. One of the representation of the behaviour which shows low self-regulation of teenager are free-sex, juvenile delinquency, fights between peers, and so forth.

Self-regulation means the ability to prevent self-behaviour. According to Schunk & Zimmerman (on Kamgar and Jadidi, 2016) this regulation is a active thinking system in a way to determine decision, attitude, and feelings aimed to achieve the planned goals. Individual conducts self-management by observing, considering, punishing to the attitude itself. This is in accordance with Buddhism teaching, that when (s)he perceives bad attitudes from other people, so that (s)he has to re-think that "I accept this behaviour because I have ever done this to other people" or commonly called by "KARMA". The self-regulation system is individual behaviour standard and self-observation and introspection as well as self-response.

Teenagers have anxiety in the face of problems in general. However, if he has a good self-regulation then it will have good self-control also in solving problems. In addition, the use of critical thinking skills aims at the self-regulatory review process resulting in interpretation, analysis, evaluation and conclusions, as well as explanations of evolutionary, conceptual, methodological, or contextual. consideration on the basis of that assessment. Critical thinking is a vital investigation tool (Phillips & Burrell, 2009). In the field of health care, the core of critical thinking can be defined as the ability to analyze, evaluate, reflect, assess information in order to establish self-regulation with the appropriate objectives in context, and problem solving (Pieterse, Lawrence, & Friedrich-nel, 2016). The most important thing is the willingness to continuously improve one's critical thinking capacity, and strive to "do it right." Critical thinking is also related to self-reflection and self-regulation. Self-reflection and self-regulation are essential for this critical outlook because it is based on students who are independent seekers of understanding and have high curiosity (Wilson, 2016).

Buddhist teenagers have diverse activities and have communities with diverse interests. This makes homogeneity in friendship higher. This is feared will lead to self-regulation in thinking to deal with social problems are very low. Very low self-regulation will give rise to vulnerable individuals in the face of problems without thinking of the consequences or consequences after exhaling some emotions when problems arise.

This study is intended to represent self-regulation in Buddhist teenager critical thinking to solve the problems. It aims to appreciate how far the self-regulation affect towards decision making solving problems based on Buddhism teaching practiced since the early age. In the critical thinking skills, indicator is included to self-regulation so that it is needed to prove whether problem solving needs self-regulation in the critical thinking. This becomes a research question in this article.

Therefore, it can be identified the effect of the religious values in solving the problems related to the self-regulation towards Buddhist teenager.

# 2. Critical Thinking Skills

There are many definitions related to critical thinking. According to Ennis (on Jane Buckley, 2015) critical thinking refers to think logically and reflectively focused on decision that would do. "decision making that is " refers to the critical thinking skill, however, the statement "future decision making" refers to disposition of critical thinking. Based on the aforementioned, the researcher concluded that critical thinking skill is the skills of logical and reflective thinking focused on decision making which would be trusted. This in line with Facione (2015: 3) that the main points of critical thinking are interpretation, analysis, evaluation, inference, explanation, self-regulation. From the six points mentioned, the researcher decided that evaluation and inference are the most prioritized indicator in critical thinking.

Now, critical thinking has become an important concept for all areas of the organization fielf/world (Kelly, on Fong, Kim, Davis, Hoang, & Kim, 2017). According to Bökeoğlu & Yılmaz, et.al., (on Hürsen, Kaplan, & Özdal, 2014) not only in the education field, critical thinking is one of the priority behaviors and ability that can be gained by all learners, but also has an important place in the field of organization and business today. In the discussion of the definition of critical thinking skills, it appears that the definition of critical thinking differs in many studies. According to Carmel and Yezierski critical thinking is the ability to see approaches to skepticism, flexibility and alternatives in solving problems (Carmel & Yezierski, 2013). Critical thinking skills need to be applied in early childhood to practice cognitive abilities and their habitual (Miller et al., 2017; Peverill, Garon, Brown, & Moore, 2017).

Critical thinking is an elusive construct to be defined and understood, in part because of the various definitions in the field (Moore, 2013). For our study, the definition of critical thinking at work is "self-assessment of goals and judgments that result in interpretation, analysis, evaluation, and conclusions, and explanations of judgment based on some judgments" (Abram, Bernard, Borokhovski, Waddington, Wade, & Persson, on Forawi, 2016; Wade, 2014). Critical thinking has been understood in two ways: skill and disposition. The ability to think critically involves a set of capacities including interpreting, predicting, analyzing, and evaluating (Buckley, Archibald, Hargraves, & Trochim, 2015).

According to Demirel, critical thinking is the ability and preference to obtain information effectively, to evaluate and use it (Demirel, on Rivas, 2017). Semer (on Rivas, 2017) defines critical thinking as a complex intellectual skill that requires data collection to make conscious, deliberate, or problem-solving decisions (Kallet, 2014). Integrated problem-solving skills are related to critical thinking skills. Thought in depth allows learners to generate reasons for solutions, look at alternatives in strategy, and see parts of the whole. Individuals who did not implement critical thinking into their attack strategies often lacked in-depth understanding and culminated in relying on rhetoric or memorization (Enright, 1992; Hanley, 1990; Kallet, 2014; ŽivkoviL, 2016).

According to Hürsen, Kaplan, & Özdal (2014) when the literature review was conducted, it was found that there are many studies in the field of education regarding the importance of critical thinking to individuals. But it also appears that there are several studies mostly in the fields of science, such as chemistry, biology, physics, economics, art and environmental sciences (Doğanay and et al, Hubard, on Coşkun, Tosun, & Macaroğlu, 2009). Although the study of critical thinking covers a large area, limited studies show in which direction the study of critical thinking develops. As a result of the literature reviewed according to Karabulut, Dikmen & Usta (on Hürsen, Kaplan, & Özdal, 2014), it is understood that a prepared content analysis study of critical thinking is only done for a single area.

In this case, it can be said that critical thinking has a question and answer approach that develops high-level thinking skills and puts individuals at the center (BL Burke, Sears, Kraus, & Roberts-cady, 2014; LA Burke & Williams, 2012; Fernando & Lecturer, 1996; Gholami,

Kordestani, & Mohammadipoor, 2016). Reflective thinking is necessarily needed in evaluation and logical thinking is also needed. This is supported by the statement from Ruggiero (2012), Peter (2012), Snyder & Snyder, (2008) (cited in Dwi Hendrayani, 2016: 276) stated that the core of the critical thinking skill is evaluation.

Therefore, this research focuses on the four indicators namely interpretation, analysis, evaluation, inference. It can be concluded that the definition of critical thinking skill is the ability to interprete, comprehend, analyze, and evaluate information and make decision regarding the problems ahead. Many scholars believed that the aspects of critical thinking skills have correlation with self-regulation. For example, Dwi Hidayati et al (2016:277) stated that interpretation deals with understanding, expressing the meaning of mathematical statement or mathematics problem. Further, analysis means identifying the relationship between given information, problems, and all concepts needed in arranging the problem solving planning. Evaluation is credibility of the statement and assess logical strength of problem solving. The last, inference means to sum up the logical conclusion by giving important and logical reasons.

According to Airasian, et all. (2010: 106-125) mentioned that aspects in the critical thinking skills above was based on Taxonomy Bloom as follows:

- (1) Interpretation: Cognitive process when students are able to change the information from a form to another form. This aspect can be said as translating, describing, paraphrasing, and clarifying.
- (2) Analysis: this aspect includes differentiating, organizing, and attributing cognitive processes. This encompasses learning to determine part of relevan or important information (to differentiate), the ways to arrange the information parts (to organize), and to determine the goal of the information (to attribute)
- (3) Evaluation: to take decision according to standard criteria, this includes the cognitive process by investigating (internal decisions-based), critisizing (external decision-based), not all decisions are evaluative.
- (4) To conclude: when students are able to abstract a consept or principle explaining the examples by observing the characteristics every single example, most importantly, by correlating those characteristics. Summarizing and executing are the most used to finish the cognitive assignments.
- (5) Explanation: is the cognitive process when students can make and use causality model in a system. It can be said that they are able to create solving problems model based on social experience and acquired humanities.

Several definitions related to critical thinking skill has been discussed by many scholars. It can be said that the aspects of critical thinking skills cover; 1) interpretation 2) analysis 3) evaluation 4) to conclude and 5) to explain.

# 3. Self-Regulation in Critical Thinking Skills for Solving Problems

The theory of self-regulation was put forward by the cognitive-social theory figure Albert Bandura. Self-regulation is one component of critical thinking skills related to problem-solving abilities in individuals. This is indicated by the opinion of self-regulation arising from the internal individuals that generate the urge to decide the purpose of life and plan strategies in determining their survival, and used to evaluate and modify behaviors undertaken (Cervone & Pervin, 2012). Based on this opinion it can be concluded that self-regulation is part of critical thinking skills that have indicators of interpretation, analysis, evaluation, concluded, and self-regulation (Facione in Abdi, 2012; Dwyer, Hogan, & Stewart, 2014).

Based on the background above, it can said that self-regulation can be used to solve the problems and self-prevention. It is necessarily needed that emotion and cognitive self-prevention to take a decision. Further, it has relation to critical thinking skills whose indicator, generally, covers interpretation and evaluation skills. So, those things are able to conclude the information or problems. The activities of organizations that are not required Campus surroundings makes the difference in student activities (Alfiana, 2013). This statement shows that activities outside the academic including the organization is one of the self-regulatory ability activists. Self-regulation

arises from the internal individual that stimulates the individual to decide on his or her life purpose and devises strategies for determining survival, and is used to evaluate and modify behaviors (Cervone & Pervin, on Alfiana, 2013; Conover & Daiute, 2017). The urgency of self-regulation ability also correlates significantly with academic achievement in school (Fasikhah & Fatimah, 2013).

Self-regulation is the ability of a person to display a set of actions aimed at achieving the target of learning by cultivating strategies in the use of cognition, behavior, and affection or emotional (Veronica Damay, 2010). Aspects of self-regulation are 1) metacognitive ability in planning; 2) self-management and interest in doing academic tasks; and 3) the cognitive strategies that learners use to learn (Veronica Damay, 2010). Motivation can have an impact on self-regulation that is able to regulate and direct energy for activity in achieving certain goals (Peverill, Garon, Brown, & Moore, 2017). Referring to some research results that explain that the intervention conducted on individuals in developing the ability of self-regulation will result in good academic achievement as well (Fasikhah & Fatimah, 2013). The result of the next research shows that the application of learning based learning has a positive and significant effect on the critical thinking and self-regulation skills of 0,021, meaning that the problem-based learning will improve the self-regulation ability of the students indirectly (Anindyta & Suwarjo, 2014).

The notion of critical thinking skill has been put forward by some experts reviewed in various branches of science. In terms of psychology critical thinking is aimed at, the opinion of self-regulation which is the result of interpretation, analysis, evaluation and inference (Gholami, Kordestani, & Mohammadipoor, 2016; Gibbs, Gambrill, & Blakemore, 2015). The notion of critical thinking is specifically discussed in terms of self-regulation where results based on interpretation, analysis, evaluation, and concluding and explaining clearly, conceptually, methodologically, have clear or contextual measurements or standards (Blondy, 2011; Smith, 2003). Several international studies have shown that self-regulation is part of critical thinking. This is demonstrated by some critical thinking skills instruments abroad that contain self regulation in measurement instruments of critical thinking. One such instrument uses the construct of critical thinking skills theory according to Peter A. Facione (1990) developed in the CCTST (California Critical Thinking Skills Test) instrument that includes the components of interpretation, analysis, evaluation, inference, explanation, and self-regulation.

### 4. Adolescent's Cognition Development and Buddhist Teenagers'

The stage of adolescence in its cognitive development enters a formal operational stage in which the individual is able to plan for his future and possess abstract thinking skills. The formal operational phase is the stage by which Piaget (in Santrock, 2003: 110) more clearly formal operational thinking is more abstract, idealistic and logical. Adolescents are also more idealistic in thinking like thinking about the ideal characteristics of oneself, others and the world. Teenagers think logically who begin to think like a scientist, devise plans to solve problems and systematically test the way of the unthinkable solution. In cognitive development, adolescents cannot be separated from the social environment. This emphasizes the importance of social and cultural interaction in cognitive development of adolescents.

According to Piaget (in Santrock, 2012: 423) pointed out that the indicator that shows the abstract quality in adolescents in the formal operational stage of adolescent thinking. is the increased tendency to think about the mind itself. One teenager commented, "I started thinking why I was thinking the way I thought I was. Then I started thinking about why I think about what I think about what I am. "If this sounds abstract, then it is, and this is a characteristic that marks the increasing focus of abstract thinking and quality.

From the above theories, it can be concluded that the fundamental aspects of cognitive change in adolescents are already operational thinking, logical thinking, abstract thinking. Another conclusion is to find the idea to put forward something that is viewed from the ability of interpretation, analysis, evaluation, conclude, and explain from a problem or information.

The discussion of Buddhist teenagers in this article is limited in the problem and teenagers morality representation. There five rules of morality (Pancasila Buddhist) which is as morality base. Introducing and practicing Pancasila must be emphasized to the teenagers in a bid to actualize good human being so that any divergence will be avoided. The principle of the pancasila is ashamedness and anxiety of bad attitude (Ottapa). Five principles are as follows:

- (1) I commit to train my self to avoid killing. All creatures want to survive their lifes and expect to live longer. No one has the right to take other's right, including hurting and embittering physically. This principle is to love all creatures. The effect of violating the principles will shorten the life and live badly. If teenagers do this well, they will not do any crimes or bad attitude.
- (2) I am determined to train my self to avoid taking items that were not given. Everyone has their own possessions and wants to keep as long as possible. The basis for the exercise of these precepts is mutual respect for the ownership of others. The consequences of these sila violations are born poor and deprived. If a teen has understood and is able to practice this pre well, then he will not commit offenses, such as: stealing, snatching, bombing, and plagiarism.
- (3) I am determined to train my self to avoid immorality. Immoral acts are defined as unlawful sex. The purpose of this precept is to suppress an overwhelming sexual appetite that can lead to irregularities. In terms of health is also beneficial to prevent HIV / AIDS. The consequence of this transgression of sila is unable to foster a long relationship with a spouse and be born in the animal realm. If a teen has understood and is able to practice these precepts well, then he will not commit offenses, such as: cheating, rape and premarital sex.
- (4) I am determined to train my self to avoid lying. This precept is aimed at not causing others to get lost and deceived, including avoiding defamation and reputation. We should be righteous, honest, useful, and based on love. Speeches can be sharper than knives. Keeping speech can keep harmony. The consequence of this transgression of sila is the unbelievable of others and has no friends. If a teenager has understood and is able to practice these precepts well, then he will not commit offenses, such as: rude, cheating, broken promises, and slander.
- (5) I am determined to train myself to avoid food and drink that weakens consciousness. A weakened awareness can confuse the mind. In a state of intoxication, a person can unconsciously commit murder, theft, immoral acts, and harsh speech. As a result of these sila violations is a loss for themselves, due to the lack of awareness of the property is not maintained, the family is not awake, health deteriorated and labeled negative by the environment. If a teen has understood and is capable of performing these precepts well, then he will not commit offenses, such as: consuming alcohol, marijuana, and drugs (Samanera Vaddhana, 2016).

These five things become the rules of action that show the moral values in Buddhism. The five Pancasila also regulate the behavior of individuals before doing something and in deciding a matter so that there is a special benchmark in doing certain things.

### 5. Research method

This study used a qualitative approach with phenomenology study method in early adolescence and middle adolescence with age range 12 to 19 years. The study was conducted at Samantabhadra Buddhist Studio, Madiun City. This research was conducted in July 2017. The instruments used were observation as well as direct and indirect interviews. The interview was conducted at the Samantabhadra Buddhist studio, Madiun City. Then, the interviews to the teenagers who lived in the sanggar were 21 people and taken using purposive sampling because some teenagers have interest for self-development exercises in school and community respectively. The subjects of this study amounted to 5 teenagers and additional data generated from interviews with studio management.

### 6. Findings

Based on the results of the study, it can be seen some description of self-regulation in accordance with the theory of self-regulation that has been disclosed in theoretical framework. Some of these include the description of self-regulation of teenagers Buddhist in Samantabhadra Studio related to problem solving by using cognitive skills.

Research subjects used to live all-round regular, from school schedule until after school will even sleep. In this studio, habituation is applied quite well in self-managing and daily activities. Based on the results of interviews conducted to the board members namely Mrs. YA on November 27, 2017 revealed that "Teenagers have been accustomed to live with a regular and scheduled all activities every day from waking up to going to sleep again. If the schedule does not go well, then they will share to the board why they cannot run the routine well ". This custom is indirectly the custom of the Buddhist teenagers here to have good self-regulation ability, as it is common with a well-structured life.

Factors that most influence the motivation of learning and achievement of the teenagers in studio is when parents tell about grief kesahapi faced. This is called family problems or family difficulties, so empathy becomes focused and mindful to think about problems at home rather than focusing on school or studio activities. This is also due to the economic condition of the family is lacking so that their ideals that have been illustrated since now to be difficult to realize, whereas their achievements in the category is quite good and high. All Buddhist teenagers at this studio studied at the flagship schools in Madiun. The problem that often arises in the achievement motivation of the Buddhist teenagers in this studio is that they often feel inferior with students who have higher achievements and because financial support is more secure than they are.

Self-regulation in overcoming academic problems related to achievement motivation requires planning and cognitive ability in the selection of learning styles. The condition of learning motivation of the teenagers in the studio is quite good. This is also because the support and motivation as the strengthening of teenagers Buddhist in this studio is considered quite good. This is indicated by the active board to be the substitute of the teenager's parents who have emotional closeness like their own children. Such closeness can be seen from when they speak and consult comfortably and get them morally supportive. States that the pattern of critical thinking of middle adolescents is more systematic than the early adolescents, so this becomes empirical evidence that middle adolescents are better able to cultivate the motivation of learning when he was finding problems (Marfu'i, 2017).

The Buddhist teenager puts the accepted teaching in critical thinking to solve problems and decide on a case by returning to the law in Buddhist teachings of causal law. This is illustrated by the example of a case in the school they are experiencing, one of the Buddhist teenagers who get bullied treatment from their friends. So the administrators try to give understanding and direction to think again that the harassment has in common with the nature that we have. Therefore, we should not hate it. We should introspect ourselves and ask forgiveness of Gohonzon for your friend's mistake because the karma came from your friend. Over time, the Buddhist teenager after reviewing himself in behaving, the hatred disappears and eventually they become good friends.

Buddhist teenagers always practice Buddhist teachings and cause-efect law. This law states that everything we do whether it is good or bad, they will return to ourself. In addition, thanking and respecting each other is very important as well. This is often taught to young buddhist in the studio, especially about self-awareness. In Buddha, helping each other and being a good attitude are prominent is the society since there is not caste in Buddha. As a result, young Buddhist is likely to have good interpersonal communication and excellent self-regulation as they can determine the good and bad things. Buddha teaching which is often used as the principle to prevent and control young Buddhist in the studio is to give affection to other people.this is called by "Maitri Karuna" or to love them because every individuals has the soul of the Buddha.

The way of praying in Buddhism is commonly referred to as "Daimoku" in the sense that it is a grand name "nammyohorengekyo" repeatedly until he feels himself calm in his feelings, so that in his behavior he will feel no burden. Daimoku can be done several times and not limited time,

while there is the term "Gongyo" or read the sutra performed twice a day; in the morning and evening. The following will present self-regulation descriptions in critical thinking to solve problems by the Buddhist teenagers'.

Table 1. The Description Self Regulation of Critical Thinking in Buddhist Teenagers'

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NO.	Self Regulation of Early Adolescent	Self Regulation of Middle Adolescent
1.	The making of mind mapping problem solving	The making of lines in the mind mapping tends
	shows the various branches in making an	to be more systematic and structured in the
	alternative solution to problem solving.	pattern of problem solving.
2.	The first step is to pray and positive thinking in	The first step in solving the problem is to pray
	order to think in adult as a form of self-control	with the name "DAIMOKU" in Buddhist terms.
	(self-regulation).	
3.	There is a root that leads to "tidak mengeluh	There is a final settlement which shows that he
	dengan masalah yang terjadi dalam kehidupan"	is aware of the error and requires self-
	(said in English: no complaints when there is a	introspection in solving the problem.
	problem comes in life)	

In Table 1 explains the self regulation of Buddhist teenagers in Indonesia. On both sides of Table 1, showing some similarities to the results in which when the adolescent Buddhist has problems, the first step is to pray or to be called the "Daimoku" in Buddhist terms. The equation can be seen in the documentation of the mind mapping of problem solving by Buddhist teenagers in the following.

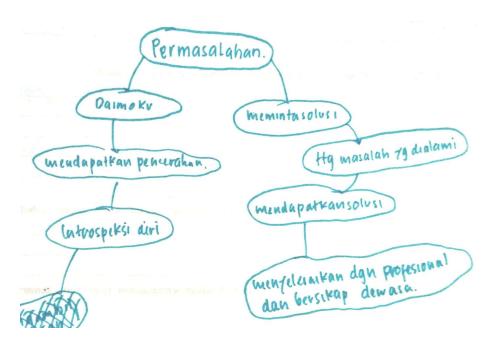


Figure 1. Mind Mapping Image Problem Solving of Buddhist in Middle Teens
\*(this image is presented like the actual research documentation using the Indonesian language)

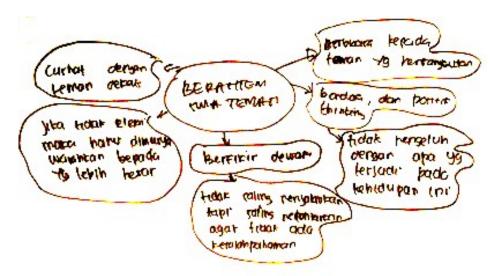


Figure 2. Mind Mapping Image Problem Solving of Buddhist in Early Teens<sup>9</sup>

In the results of research shown by making mind mapping in solving the problems of one of the teenagers Buddhist in solving the problems. One of the Buddhist teenagers have represented the "daimoku" in initiating behavior control. The method of solving the problems committed by teens Budhist first encountered the problem was to pray according to their belief called "Daimoku". After that, the prayer is sung to ask for a solution in front of Gohonzon to get enlightenment. When they get into trouble, Budhist teenagers are asked to think critically in self-introspection for wrongs committed to others. This is done so that in his life is taught to control his behavior against others related to self regulation. The last stage in solving the problem according to one of the teenagers Budhist Samantabhadra Studio is to direct themselves to be mature in solving and addressing the problem.

In the results of this study there are similarities of the first and second mind mapping image documentation results of self regulation in solving the problem. Some of the documentation of the research results shows the direction of the arrow line to "daimoku" which is the same as mentioning the great name or praying while in the second picture there is the arrow line to "praying and positive thinking".

It can be seen that some equation from result of Mind Mapping image documentation of problem solving. Both results of self-regulation in critical thinking skills Buddhist early and middle teenagers show the direction of the arrow line to "daimoku" which is the same as mentioning the great name or praying while in the representation of the arrow line in these problem solving Buddhist teenager's simple mind map to "praying and positive thinking". Both levels of youth Buddhist in Samantabhadra Studio have good problem solving skills and have good self-regulation in terms of problem solving. They are considered capable of thinking abstractly and logically thinking in solving problems that are quite disturbing academic activities, so that they are able to balance the use of self-regulation portion in critical thinking to solve their problems

This is in line with the theory that self-regulation is highly related to the behaviour in a bid to achieve certain purposes. Therefore, it can be concluded that self-regulation affects the success through behaviour control which is appropriate in achieving the goal (Alfiana, 2013). When Buddhist teenagers are able to practice religious values and Buddhist way of life, so they will practice self-regulation by praying or 'daimoku'.

### 7. Conclusion, Implications, Limitations

Based on the results of the study, it can be concluded that self-regulation in critical thinking skills on Buddhist teenagers plays a significant role in solving the problems. Both mind mapping

<sup>&</sup>lt;sup>9</sup> This image is presented like the actual research documentation using the Indonesian language.

pictures of problem solving in early teenagers and medium teenagers shows the similarity. Both pictures shown that the vector to "daimoku" or praying. Then, the second picture shows praying and positive thingking vector. Both levels of Buddhist teenagers at Samantabhadra studio has the ability to solve the problems very well and self-regulation. They are able to think abstractedly and logically to solve the problems.

The implication of this research aims to develop several counselling service materials and teenagers development counselling. The given preservative service in developing teenagers' cognitive and social potency drive them to be more productive and highly engaged to achieve their dreams. Theoritically, this research contributes to the theory that self-regulation is part of critical thinking skills. Practically, this research is intended to improve the critical thinking skills needed in identifying the self-regulation to solve teenagers' problems. The intervention treatment can be done by grouping in order to be effecient. Empirically, this implication is intended to enrich the self-regulation reference for Buddhist teenagers who live and dedicate in the dormitory.

This study is imperfect and unable to be basic criteria for a good research, so this article needs several strategies to develop. The phenomenology of Buddhist teenagers cannot be generalized to other Buddhist teenagers since this research is included to subjective research or it can only be applied in the region that can be used as research background. The limitation of this research is that the researcher did not intervene the self-regulation, so that the development of the self-regulation of the teenagers were not seen regularly and consistently. The development of counselling service to teenagers whose has risky problems which affect to their self-regulation can be developed more in the future research. Then, it can make them uncontrolable.

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