Effectiveness of Information Service with Problem Based Learning Model to Improve Self Control of Students in Junior High School.

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Abstract

Self-control overrides or inhibits simultaneous compulsion, behavior, or desires. However, students in learning activities exhibit low self-control behavior that is during learning activities take place students often do activities that are not related to the learning process. Efforts made in improving students' self control are information services using problem based learning models. This type of research is Quasi Experiment with the design of The Non Equivalent Control Group Design. The research subjects were students of class VIII.3 as the experimental group and students of class VIII.8 as the control group at SMP Negeri 13 Padang. The research instrument used was self control with a Likert scale model. Data were analyzed using the Kolmogorov-Smirnov 2 Independent Sample test. The results showed that the problem based learning model information service was effective in improving students' self control.

Keywords: Self Control, Information Services, Problem Based Learning

Introduction

Self control as expressing an individual's ability to govern and control his behavior and emotions in acting (Al-smadi & Bani-abduh, 2017). The teachers argue that self-control is needed for the academic achievement of students (Dewey, 1938; Duckworth, Taxer, Eskreis-winkler, Galla, & Gross, 2019). Self control as a way for someone to regulate and control their feelings, thoughts and behavior to build good relationships with others (Peker, 2017). Self-controlling learners develop more academically at each level of formal schooling (Duckworth et al., 2019).

Rianti & Rahardjo (2013) revealed that 68.83% of students had moderate self control. Individuals with low levels of self control show a combination of characteristics of their attitudes and behaviors; (1) have orientation in the present, (2) have a tendency to postpone work and do fun things, (3) prefer easy and simple tasks, but don't like activities that require effort, perseverance and ambition, (4) choose risky behavior rather than doing wise, (5) impressed by work that requires less skills and planning, and (6) uncaring, irritable, easily offended, selfish, and does not understand others (DeLisi et al., 2010).

Widyari (2012) revealed that students who have low self-control will tend to procrastinate, ie procrastinating in making school assignments. Students who have low self

control will cause boredom and boredom in learning (Vitasari, 2016). Based on the results of the counselor's interview and the results of the AUM analysis revealed that there were students who chose not to attend school because they did not make assignments, some students still conducted activities to communicate with friends when the teacher delivered material and carried out activities that were not related to the learning process. This cannot be tolerated because self-control is the main function and an important key to success in life (Baumeister et al., 2007). Actions without self-control cause short-term setbacks to subsequent self-control, even to unrelated tasks (Baumeister et al., 2007).

One way to maximize self control is to increase information, which can be obtained through information services (Thalib, 2010). Information service is a counseling service that helps students receive and understand various kinds of information related to personal, social, learning, career/position, and further education in a directed, objective, and wise manner (Prayitno, 2013). Information services are provided classically to students. Mukhtar, Yusuf, & Budiamin (2016) effective classical tutoring service program to improve students' self control.

The provision of information services can also use the learning model, it is intended that the service process provided can achieve the objectives of the service process (Alfath, Firman, & Syahniar, 2018). The approach provided in this information service is a model of problem based learning (learning based on problems). The problem based learning model is a learning model that is based on the principle of using problems as a starting point for the acquisition and integration of new knowledge to be gained (Al-Tabany, 2014). Problem-based teaching is an effective approach to get students to think and challenge students to solve authentic problems in an information-rich setting. They can build their own solutions that contribute to the most effective experiences such as methods, processes and epistemology of the discipline (Birgili, 2015).

Duch, Groh, & Allen (2001) explain in a problem-based approach, used to motivate students to identify and examine the concepts and principles they need to know to overcome these problems. Learners are trained to use more cognitive abilities and think critically in solving problems regarding self control that cause student learning activities to be less effective. The problem based learning model in understanding students 'problems moves from confusion by activating students' initial knowledge and finding resources or solutions to understand the problem, they are also involved in peer learning (Yew & Goh, 2016).

Thalib (2010) Thalib (2010) students need to hone their ability to solve problems related to self-control by using problem-based learning models to deal with or adapt to the environment. Based on the description above, this study aims to determine the Effectiveness of Information Services for Problem Based Learning Models in Improving Self Control of Junior High School Students.

Method

This research includes quantitative research methods with the design of quasi experiment with the design of Non Randomized Pretest-Posttest Control Group Design, which aims to see the difference in the average score of self-control experimental group students and the control group before and after being provided with information services using problem based models learning and without using the problem based learning model. The study was conducted on students of 13 State Middle School Padang, West Sumatra, Indonesia. The subjects in this study were students of class VIII.3 as the experimental group and students of class VIII.8 as the control group. The instrument used was a self-control

questionnaire developed by researchers with a Likert scale model, consisting of 54 items with a validity of 0.531 and a reliability of 0.946 (Alpha Cronbach). The data obtained were analyzed using the Kolmogorov-Smirnov 2 Independent Samples test.

Results

The results of the study before and after being given treatment using information services based on problem based learning models and without problem based learning models. The following self control learning scores of students in the experimental group and the control group.

Table 1. Pretest and Posttest Results of the Experiment Group and the Control Group

Interval	Category	Experiment Group				Control Group			
		Pretest	%	Posttest	%	Pretest	%	Posttest	%
≥226	Very high	0	0	8	26,67	0	0	5	16,67
183-225	High	9	30,00	22	73,33	11	36,67	13	43,33
140-182	Medium	21	70,00	0	0	18	60,00	12	40,00
97-139	Low	0	0	0	0	1	3,33	0	0
≤96	Very Low	0	0	0	0	0	0	0	0
Total		30	100	30	100	30	100	30	100

Table 1 above in the self-control experimental group of students when pretest tends to be in the medium category with a percentage of 70%. Whereas in the control group it was found that self control of students was in the medium category with a percentage of 60% and 3.33% in the low category. Individuals with low self-control tend to be categorized as impulsive, insensitive, risk takers and sensation seekers (Grasmick, Tittle, Bursik, & Arneklev, 1993; Turner, Piquero, & Pratt, 2005). After the treatment of the two groups, the students' self control increased. Posttest results found in the experimental group increased 73.33% of students were in the high category and 26.67% of students were in the very high category, students with high self-control were able to deal with temptation but not consistently (Duckworth & Gross, 2016). Students are able to face temptations during the learning process. In the control group, self control increased with a percentage of 43.33% in the high category. One important determinant of success is self-control, self-control has the capacity to regulate attention, emotions, and behavior (Duckworth & Gross, 2016). Students who have high self control will have higher academic achievement and perform better in various actions (Ducksworth & Seligman, 2005; Tangney, Baumeister, & Boone, 2004; King & Gaerlan, 2014).

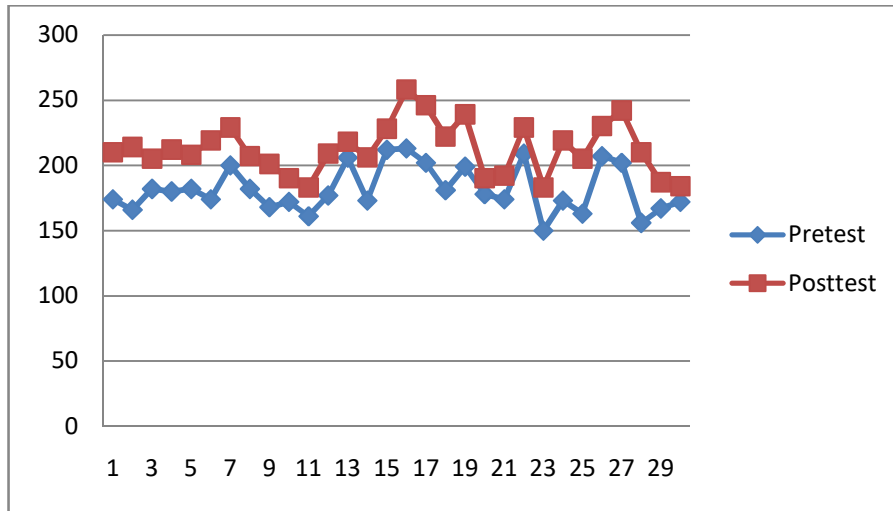Furthermore, changes in learners' self control can be seen in the following diagram:

Figure 1. **Histogram of Pretest Results and Posttest Self Control of Experimental Group Students**

Based on Figure 1, the difference in self-control of students is seen before being given the problem based learning model information service after being given the problem based learning model information service treatment. In the figure, it is seen that students' posttest self control scores were significantly increased in the experimental group.
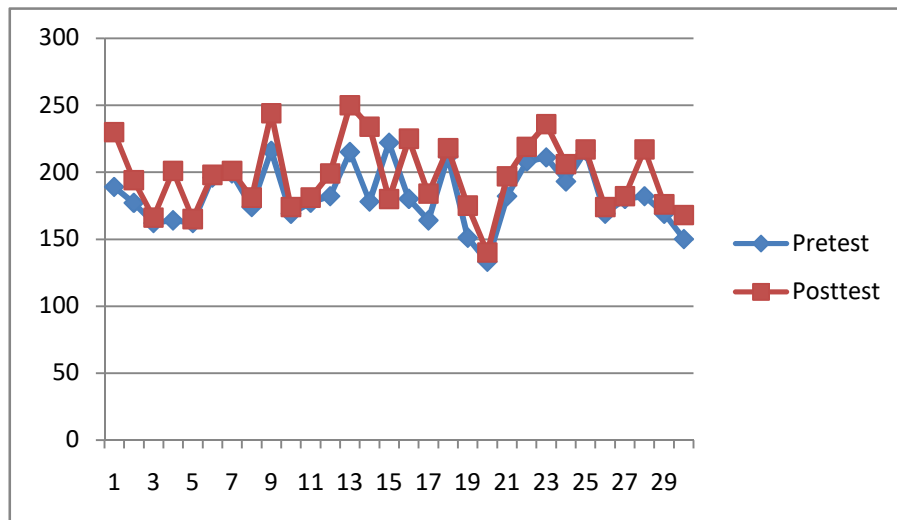

Figure 2. Pretest Results and Posttest Self Control Histogram of Control Group Students

Based on Figure 2, there is a difference in self-control of students before being given information services without a problem based learning model with after being given information service treatment without problem based learning models. In the figure, it was seen that the increase in posttest self-control scores of students in the control group, but the increase in the experimental group was greater than the control group.

Furthermore, the results of the posttest of the experimental group and the control group can be seen in the table below:

Table 2. Trial of Kolmogorov Smirnov 2 Independent Experiments and Control Groups

Test Statistics[a]

		SKOR
	Absolute	,400
Most Extreme Differences	Positive	,000
	Negative	-,400
Kolmogorov-Smirnov Z		1,549
Asymp. Sig. (2-tailed)		,016

a.Grouping Variable: Group

Based on Table 2, it is known the results of the posttest test of the experimental group and the control group in the Asymp column. Sig. (2-tailed) is 0.016. A significance value of 0.016 is smaller than 0.05 (0.016 <0.05). This means that there are differences in the results of the experimental group treatment that is provided information services using the problem based learning model and the control group that is provided information services without using the problem based learning model. This has shown that students are academically successful in using problem based learning models (Erdogan & Senemoglu, 2014). So, problem based learning model information services are effective in improving students' self control at school. This is because with more recent studies and digging deeper, the process of problem based learning leads to positive learning outcomes (Yew & Goh, 2016).

Discussion

The research findings are that there are significant differences in the self control of students in the experimental group with the control group. Self control is an aspect of motivated behavior, a term that in a broad sense encompasses all intentional behavior and is directed at the goal in this case the aim is to direct the behavior in learning in order to receive the lesson well (Duckworth, White, Matteucci, Shearer, & Gross, 2016). The power of self control is needed for the executive component of the self (that is, aspects of the self that make decisions, initiate and interfere with behavior, and provide control) to function (Muraven & Baumeister, 2000). Students who have a high level of self control will be more successful in school. They have higher academic achievement and perform better in various actions (King & Gaerlan, 2014).

One of the ways that can be done in order to improve students' self control is to provide problem based learning model information services. Information service is a counseling guidance service that allows students to receive and understand information that can be used as consideration for decision making in the interests of students (Mulyadi, 2016). Problem based learning learning that is triggered by problems that require solutions (Yew & Goh, 2016). Schools present a dilemma of self-control, almost all students experience conflicts between academic and non-academic which is considered more important (Duckworth et al.,

2019). It is necessary to provide problem based learning model information services so that students find self control solutions in learning.

The provision of information services using the problem based learning (PBL) model requires students to be more active in their opinions when activities take place. The advantages of problem-based learning strategies one of which is problem solving can develop students' ability to think critically, innovatively, increase motivation from within themselves to learn and develop their ability to adapt to new knowledge (Mulyadi, 2016). This is consistent with the results of the study Subekti (2015) which states the problem based learning model can be used to improve students' critical thinking skills.

Providing information services using the problem based learning model in addition to making the classroom atmosphere active and also able to direct students to move to use their abilities in the problem solving process. Where the application of PBL skills emphasizes the daily experiences of students so that they will understand the importance of independent learning (Fukuzawa, Boyd, & Cahn, 2017). Information services using problem based learning models are useful in stimulating the intelligence of students from within themselves to solve problems of self control in learning. Students develop skills that can be applied across disciplines, such as collaboration, problem solving, and critical thinking (Fukuzawa et al., 2017).

Problem based learning is a student-centered learning approach that empowers students to research, integrate theory and practice, and apply knowledge and skills to develop solutions that are appropriate for a given problem (Savery, 2006). They do independent learning, before discussing and refining the knowledge they have obtained from the teacher (Wood, 2003). The application of problem based learning can develop critical thinking skills (Fakhriyah, 2014). Information services using the problem based learning model is a service that can help students develop critical thinking skills and solve problems through the stages of scientific methods so that students can learn knowledge related to self control problems. In order for the services provided to be successful the professionalism of a teacher in carrying out his duties as an educator is very important (Netrawati, Khairani, & Karneli, 2018). Because the results of the service are very important to determine students in order to develop optimally (Khofifah, Sano, & Syukur, 2017).

Conclusions and recommendations

Based on the research data, it can be concluded that information services using the problem based learning model are very effective in improving students' self-control because students are led to think critically in solving problems related to self control. This can be seen from the self control score in the experimental group experiencing a greater and more significant increase than the control group.

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