NOVATEUR PUBLICATIONS
JournalNX- A Multidisciplinary Peer Reviewed Journal
ISSN No: 2581 - 4230
VOLUME 7, ISSUE 1, Jan. -2021

MODELING LEARNING THEORY DEVELOPMENT SOCIAL BANDURA IN LEARNING FOR MATHEMATICS CLASS V STUDENT AT SDN 30 PAGUYAMAN

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ABSTRACT:

This study aims to determine the effectiveness of modeling the development of bandura social learning theory in mathematics learning for fifth grade students at SDN 30 Paguyaman. The research method used is research and development or Research and Development (R&D) which goes through 4 stages of implementation, namely, initial study, product development, field testing, and revision. The results of hypothesis testing showed that there was an increase in students' social learning in Mathematics from 16.7% to 26.8% in stage I and then increased again to 45.65% in stage II after the revision was made. This proves that the hypothesis of the development of the Bandura model of social learning in Mathematics for grade V students at SDN 30 Paguyaman is acceptable.

KEYWORDS: Bandura Model, Mathematics Learning, Bandura Social Learning Theory.

INTRODUCTION:

The current development of globalization has greatly influenced various aspects of life, especially the lifestyle of some people. This can be seen by the shifting of old values into new values. Faced with this challenge, some people who are very concerned about these changes do not want to be left behind and will try to balance these changes. One of the ways this is done is by studying. Society needs to learn about human growth and development in order to be able to apply itself properly in life. Learning is a process of change in the human personality, and this change is manifested in the form of an increase in the quality and quantity of behavior such as increasing skills, knowledge, attitudes, habits, understanding, skills, thinking power, and other abilities. One of the psychologists who is famous for his learning theory is Albert Bandura. Bandura's most famous theory is Social Learning Theory (Social Learning Theory) which emphasizes the cognitive components of thought, understanding, and evaluation.

Mathematics in education is one of the basic sciences that can be used to support other sciences such as physics, chemistry, computers, and so on. In addition, mathematics is also flexible and always develops according to the demands of the times. The demands of the progress of this era encourage educators to be more creative in developing and applying mathematics as a basic science. Education experts have realized that the quality of education is highly dependent on the quality of teachers and their learning practices, so that improving the quality of learning is a

fundamental issue for improving the quality of education nationally.

However, we cannot deny the fact that until now there are still many people (students) in this country who have difficulty learning mathematics. Students' cynicism about mathematics in school often occurs because of the difficulty in linking what is learned in mathematics with everyday realities, practical everyday uses. This seems to be inseparable from the tendency of learning mathematics to emphasize more on product aspects, rather than process aspects and attitude aspects.

Principles, laws and theories are more emphasized and get a larger and more dominant portion of mathematics learning in schools, so that the process aspects (methods or methods used to acquire knowledge) and attitudes (scientific attitudes which are various beliefs, opinions and values) which must be maintained by those who study it) has not received sufficient attention. As a result, mathematics learning becomes "dry", abstract, theoretical, confusing and boring. Mathematics lessons seem to be separate and apart from the realities of everyday life.

As found in SDN 30 Paguyaman, students have a tendency to be unable to understand the subject matter taught by the teacher. This fifth grade student of SDN 30 Paguyaman finds it difficult to understand the material in Mathematics, this happens because the learning process is monotonous and difficult to describe in their daily life. Teachers are also tied to Mathematics subject matter which is often more concerned with results than processes, without paying attention to the cognitive components of thought, understanding, and evaluation which are Bandura's Social Learning Theory.

Based on the description above, the researcher is motivated to conduct a study of this problem in a study entitled "Modeling Development of Bandura Social Learning Theory in Mathematics Learning for Class V Students at SDN 30 Paguyaman." This study aims to determine the effectiveness of modeling the development of Bandura's Social Learning Theory in mathematics learning for fifth grade students at SDN 30 Paguyaman.

METHOD:

This research is a type of research and development or Research and Development (R & D). The quantitative approach was chosen to be used in this research, which is an approach that primarily uses a knowledge paradigm based on a constructivist view. The samples in this study were 5 teachers and 20 students. class V SDN 30 Paguyaman. Product testing is carried out in 2 stages, namely small-scale trials and large-scale trials.

The data used in this research are qualitative and quantitative data. Qualitative data is data that is described in nature. This data source was obtained from a combination of observations, interviews, and questionnaires with the content in the form of criticism and suggestions from experts / experts in each field related to the development of Bandura's social learning model which validates orally or in writing as constructive input for product revision materials. , while the quantitative data were obtained from the results of the assessment of observation sheets by experts and the learning process questionnaire instrument. Qualitative data analysis was done by changing the response data into a score and interpreted using a Likert scale. Quantitative data analysis was analyzed mathematically and interpreted using the criteria listed in Table 1.

Table 1. Assessment Criteria

No.	Scale	Criteria
1	5	Very Good (VG) / Strongly Agree (SA)
2	4	Good (G) / Agree (A)
3	3	Enough (E) / Enough Agree (EA)
4	2	Less (L) / Less Agree (LA)
5	1	Not Good (NG) / Strongly Disagree (SD)

RESEARCH RESULTS AND DISCUSSION:

Research result:

A. Results of product trials:

1. The results of expert validation by modeling the development of Bandura's social learning theory:

Validation is categorized into 4 bases of cognition, namely attention or attention, retention or remembering, motion reproduction, and motivation. These aspects are validated by 1 validator. The research data shows that the total average value of the experts using the Bandura social learning model is 47. With an average of 3.91 it is stated in accordance with the value conversion table and categorized as feasible. With these results, the product can be tested on students.

2. The results of expert validation on Mathematics learning design for fifth grade students of SD 30 Paguyaman

Validation of mathematics learning design experts is categorized into 3 mathematical concepts, namely planting basic concepts (planting concepts), understanding concepts, and developing skills. The research data shows that the total average score of the Mathematics learning design experts is 4.2. According to the conversion table, the value is categorized as feasible. With these results, the product can be tested on students.

3. The results of the subject teacher validation

After the product was tested on a small scale, the researcher provided a sheet in the form of the eligibility of the Mathematics teacher in assessing the product. As for the aspects of assessment that were assessed by subject teachers, namely aspects of the opening / initial activities, content / material, and closing / conclusions. Based on the research data, it was found that the total average score of the subject teachers was 4.7. According to the conversion table, the value is categorized as feasible.

B. The effectiveness of the learning model:

1. Process and evaluation results:

The use of the Bandura Model Social Learning in Mathematics for Grade V Students at SDN 30 Paguyaman was held 2 meetings with 2 Basic Competencies for grade V students at SDN 30 Paguyaman. Before carrying out learning using the Bandura model of social learning, a questionnaire was distributed to see the level of understanding of students' learning in semester 1 mathematics. The result of the questionnaire acquisition (pretest) was 16.7%. This shows that the social learning of grade V SDN 30 Paguyaman students in Mathematics is still relatively low. At the next meeting, a questionnaire (process) was distributed to see changes in student learning outcomes. The results showed an increase of 26.8%. The improvement of social learning in students' Mathematics in 2 meetings using Bandura social learning can be seen in the diagram in Figure 1.

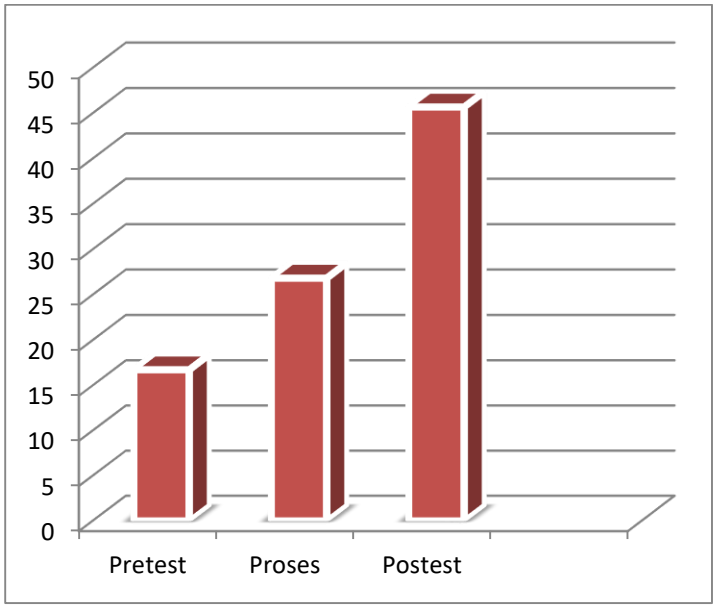

Figure 1. Improved Social Learning with the Bandura Model in Mathematics for Class V Students at SDN 30 Paguyaman

In 4 meetings, the Bandura model of social learning in Mathematics for grade V students at SDN 30 Paguyaman has increased. The results of the Gain Score analysis using a Likert scale calculation are described in Table 2.

Table 2. Gain Score Analysis Using Likert Scale

No.	Students	Score	
		Pretest	Posttest
1	SSD301	3,4	9,2
2	SSD302	3,6	9,6
3	SSD303	3,4	9,4
4	SSD304	5	8
5	SSD305	3,2	8,6
6	SSD306	4	9,6
7	SSD307	3,2	9,4
8	SSD308	2,6	8,4
9	SSD309	3,4	9,2
10	SSD3010	3,8	9
11	SSD3011	3,8	9,6
12	SSD3012	3,6	9,2
13	SSD3013	2,6	9,2
14	SSD3014	2,4	9
15	SSD3015	2,8	9,4
16	SSD3016	3,8	9,2
17	SSD3017	3,4	9,6
18	SSD3018	3,6	9,4
19	SSD3019	2,6	8,8
20	SSD3020	2,6	8,8
Total		**66,8**	**182,6**
Gain Score		**115,8**	

The posttest result in this study was 45.65% of the ideal value of 50%. With these results it can be concluded that the use of Bandura Social learning in 2 Basic Competencies in semester 1 has succeeded in improving students' social learning in Mathematics subject matter.

2. Hypothesis testing:

Hypothesis testing shows that there is an increase in student social learning in Mathematics from 16.7% to 26.8%, and then to 45.65%. This proves that the hypothesis of the development of the Bandura model of social learning in Mathematics for grade V students at SDN 30 Paguyamand is acceptable.

Hypothesis formulation was tested using Microsoft Excel application. From the results of calculations through Microsoft Excel, it can be seen that the interpretation of the results of the statistical analysis of the hypothesis-test test, the t-value is 23.17 and the t-criticaletail or t-table value is 1.71 (> 0). So it can be concluded that H0 is rejected and H1 is accepted, because students' social learning in Mathematics before participating in learning uses the Bandura social model ≠ the average social learning of students in Mathematics subjects after taking learning uses the Bandura social model.

DISCUSSION:

Principles, laws, and theories are emphasized and get a larger and more dominant portion of mathematics learning in schools, so that the process aspects (methods or methods used to obtain knowledge) and attitudes (scientific attitudes which are various beliefs, opinions and values) the value that must be maintained by those who study it) does not get enough attention. As a result, Mathematics learning becomes "dry", abstract, theoretical, confusing and boring. Mathematics lessons seem to be separate and apart from the realities of everyday life.

As found in SDN 30 Paguyaman, students have a tendency to be unable to understand the subject matter taught by the teacher. Students find it difficult to understand the material in Mathematics. This happens because the learning process is monotonous and difficult to describe in their daily life. Teachers are also attached to Mathematics subject matter which is often more concerned with results than processes without paying attention to the cognitive components of thought, understanding, and evaluation which are Bandura's social learning theory.

The use of the Bandura model of social learning in Mathematics for fifth grade students at SDN 30 Paguyaman was carried out 2 meetings with 2 Basic Competencies for fifth grade students at SDN 30 Paguyaman. Before carrying out learning using the Bandura model of social learning, a questionnaire was

distributed to see the level of understanding of students' learning in semester 1 Mathematics. The result of the questionnaire acquisition (pretest) was 16.7%. This shows that the social learning of grade V SDN 30 Paguyaman students in Mathematics is still low. At the next meeting, a questionnaire (process) was distributed to see changes in student learning outcomes. The results showed an increase of 26.8%. In 4 meetings, the Bandura model of social learning in Mathematics for grade V students at SDN 30 Paguyaman has increased.

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Every activity to improve education will encounter factors that can support or hinder the success of these activities. The following are the supporting and inhibiting factors for the implementation of the social learning model Bandura in Mathematics for grade V students at SDN 30 Paguyaman:

1. Supporting factors for the development of the Bandura model of social learning

a. Stakeholders who always assist in completing the development of social learning in the Bandung model

b. Students who are enthusiastic about participating in the Bandura model of social learning

c. Parents of students who always provide support in the learning process

d. Increasingly advanced technology

2. Inhibiting factors for the development of Bandura's social learning model

a. Limited time

b. Lack of activity at school

c. Differences in student characteristics

CONCLUSION:

Hypothesis testing shows that there is an increase in student social learning in Mathematics from 16.7% to 26.8%, and then to 45.65%. This proves that the hypothesis of the development of the Bandura model of social learning in Mathematics for grade V students at SDN 30 Paguyaman is acceptable.

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