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Classroom Management Through Problem Solving: Teachers' Strategies in Realizing Quality Learning

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Abstract. *This study aims to describe the classroom management through problem-solving strategies in realizing quality learning. This research was conducted by quantitative approach. The main data of this study was 108 high school teachers. The technique used for data collection is questionnaire. The analysis technique used descriptive statistics, factor analysis, normality test, and inferential statistical test through t and anova tests. The results of the analysis show that classroom management efforts through problem solving are categorized as good by all aspects. Every aspect is valid with Alfa Cronbach's 0.766, thus, normal. The analysis of categorical factors is relevant in analyzing the classroom management through problem solving in realizing quality learning, which is above 0.7. In correlational analysis and one t-test of sample, all data are correlated and have significant role seen by the value of sig. 0.000 < 0.05. The Anova test through the linear path shows all the linearity as it impacting the problem solving in classroom management with value of F 0.000 < 0.05. Each aspect has its own characteristics on its implementation in learning. It shows that classroom management through problem solving can be a strategy in realizing quality learning.*

Keywords. *Classroom Management, Problem Solving, Teacher Strategy, Quality Learning.*

1. INTRODUCTION

Education is one of the most important aspects in improving human abilities and qualities. In the educational process, teachers have a strategic role in achieving educational goals to develop the aspects of personality and human abilities, whether cognitively, psychomotor, or affectively. Teachers as educators have a very important role in teach the students and improving the quality of learning. Without teachers, the achievement of these qualities will be affected [1]. One of the ways of teachers in improve the quality of learning is using the problem-solving strategies in classroom management.

Problem-solving strategies is one of the ways to improve the quality of learning by solving problems faced by students. The results of the study show that problem-solving strategies can help the learning process and the quality of students' thinking better [2]. The same issue in the observation of previous researchers that the ways of solving problems encourage students' creativity [3]. By these strategies, teachers can improve students' ability to think critically, innovatively, and creatively. Teachers can also improve students' ability to communicate and collaborate among their classmates.

Problem-solving based learning process will have a positive impact on students and teachers. It can be seen in the observation conducted that the results of the experiment of the concept of problem-solving-based learning has a significant effect on students' problem-solving skills, especially in the context of language skills such as writing [4].

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Problem-solving strategies in general help the implementation of quality learning. In the learning process, one determining factors for learning among various aspects is the solution of these problems [5]. This situation shows that problem solving is an indicator that needs to be considered in realizing the quality learning.

However, in the process of classroom management, teachers often face various problems which interfere the learning process. These problems can show up as the student motivation problems, teacher ability problems, and learning strategies used. These problems can essentially be solved by teachers by their pedagogical provisions. The presence of teachers has a role in solving the problems of the students. Teachers are facilities for students, especially if it comes to learning. Reminded that the existence of teachers in learning cannot be separated, especially the effort to achieve better learning goals [6]. Classroom management conducted by teachers during learning becomes a positive prediction tool and indicator of learning success [7].

Classroom management is the teachers' skill to create and maintain optimal learning conditions also preserve them from possible disruption in the teaching and learning process. Classroom management related to problem solving involves several elements, such as understanding various problems, interpreting each problem, creating a problem solving map, providing and presenting solutions of each problem, taking the initiative of various problem solving, being disciplined and persistent in dealing with problems, evaluating the impact and success of problem solving, identifying the potential symptoms which could leads to problems, implementing various designed solutions [8]. Teachers must be able to identify existing problems in order to face and solve them properly.

Observations have been made that the problems of classroom management if it comes to problems solving in realizing quality learning can be in the form of limitations in strategies, motivation, teacher abilities, teachers' perception patterns and consistency, learning situations and environments [9]–[13].

. These problem can affect the quality of learning achieved, if its not carefully observed and analyzed. Therefore, several previous studies have examined the problem of classroom management from the aspect of creating learning atmosphere [14], the use of learning methods [15]; empowerment of teacher knowledge and awareness [16], making learning planning and implementation [17]. All of these studies make innovative contributions to classroom management to achieve learning goals.

Several previous studies have shown that many ways and actions are taken to bring better learning. This research focuses on the aspect of problem solving in accordance with observation indicators. These indicators are the basis for observations in the study. This study aims to describe classroom management through problem-solving strategies in realizing quality learning. This research is expected to contribute in realizing quality learning and encourage teachers' understanding of solving problems in the classroom management process.

Research Problem

Based on the background presented, the objectives of this research are:

1. How is the quality of problem solving for classroom management in realizing quality learning?
2. How is the validity and reliability of the problem-solving aspect for classroom management in realizing quality learning?
3. How is the factor analysis of the problem-solving aspect for classroom management in realizing quality learning?
4. How is the significance level of the problem-solving aspect for classroom management in realizing quality learning?
5. How is the diterminative coefficient (R) of the problem-solving aspect for classroom management in realizing quality learning?

2. MATERIALS AND METHODS

This research used a quantitative approach. The main data of this study was the information of teachers. In obtaining the data, the researcher directly took data from the field, to the state-status educational unit. The research sample was 108 high school teachers. The technique used for data collection is questionnaire. The type of questionnaire in this study was the Likert scale. The Likert Scale contains a systematic statement to show how a teacher responds to statements in a questionnaire. The alternative answers available in the questionnaire were as follows: (1) Never, (2) Rarely, (3) Sometimes, (4) Often, and (5) Always, with scores of 1, 2, 3, 4, and 5 for positive questions and 5, 4, 3, 2, and 1 for negative statements.

The development of the instrument was conducted in several stages, such as: compiling the dimensions and indicators of each variable, compiling the instrument grid, and compiling the statement items. Technically, it was directed to the way teachers present

quality learning. The analysis of research data was conducted by observing each item of the questionnaire filled by the teachers. The analysis technique used descriptive statistics, factor analysis, normality test, and inferential statistical test through t and anova tests.

The decision-making criteria to the mean analysis by calculating the score and the range of answers refer to the table 1.

Table 1. Interval and Mean Criteria

No.	Scale		Category
1	4.41—5.00	1.80—1.00	Excellent
2	3.41—4.40	2.60—1.81	Good
3	2.61—3.40	3.40—2.61	Quite good
4	1.81—2.60	4.40—3.41	Bad
5	1.00—1.80	5.00—4.41	Very bad

Thus, related to the correlation decision using the correlational level refer to the table 2:

Table 2. Correlation Level Interpretation

No.	Scale	Category
1	0.80 until 1.00	Very strong
2	0.60 until 0.799	Strong
3	0.40 until 0.599	Medium
4	0.20 until 0.399	Low
5	0.00 until 0.199	Very low

For the decision of Alfa Cronbach's value is divided into three levels:

Table 3. Alpha Cronbachs' Category Table

No.	Scale	Category
1	0.71 until 1.00	Very feasible
2	0.41 until 0.70	Quite feasible
3	0.00 until 0.40	Not feasible

3. RESULT AND DISCUSSION

Demographic Description

The results of the distribution of respondents can be classified based on demographic conditions, such as: gender, employment status, religion, and ethnicity. Demographic circumstances can be a factor that influences the actions of a person. The demographic distribution data of respondents can be seen in table 4.

Tabel 4. Deskripsi Demografi

Group	Aspect	n	%	SD	Average	Category
Gender	Male	17	15.7	0.339	3.88	Good
	Female	91	84.3	0.485	4.08	Good
Status	Civil Servant	83	76.9	0.441	4.10	Good
	Non Civil Servant	25	23.1	0.528	3.88	Good
Religion	Islam	105	97.2	0.469	4.03	Good
	Christian	3	2.8	0.222	4.44	Excellent
Tribe	Malay	42	38.9	0.395	4.03	Good
	Javanese	7	6.5	0.542	3.87	Good
	Batakese	5	4.6	0.230	4.49	Excellent
	Minangese	50	46.3	0.510	4.00	Good
	Bugis	1	0.9	0.000	4.44	Excellent
	Others	3	2.8	0.064	4.59	Excellent

Based on table 4, it can be seen that, first, respondents by the gender are both in a high category. Second, respondents by the employment status are both in a high category. Third, respondents by the religious groups have two categories, those are Islam in good category and Christianity in very good category. Fourth, there are two categories of respondents by the ethnicity, such as Malay, Javanese, and Minang are in good category while Batak and Bugis are very good. Each aspect of the group has efforts and creativity in classroom management through problem solving in realizing quality learning. This demographic situation also affects the decisions and actions that will be taken in learning [18] such as classroom management through problem solving.

Statistical Analysis Description

The results of the analysis of classroom management through problem solving in realizing quality learning which is understood and conducted by the respondents based on variety of responses, averages, and standard deviations. The analysis data can be seen in tables 5 and 6.

Table 5. Types of Respondent to Problem Solving

Aspect	NV	%	RR	%	ST	%	OT	%	AW	%
P1	-	-	-	-	11	10.2	55	50.9	42	38.9
P2	-	-	-	-	7	6.5	60	55.6	41	38.0
P3	1	0.9	6	5.6	39	36.1	49	45.4	13	12.0
P4	-	-	1	0.9	11	10.2	57	52.8	39	36.1
P5	-	-	2	1.9	15	13.9	60	55.6	31	28.7
P6	-	-	1	0.9	10	9.3	53	49.1	44	40.7
P7	-	-	3	2.8	12	11.1	67	62.0	26	24.1
P8	3	2.8	3	2.8	27	25.0	66	61.1	9	8.3
P9	1	0.9	3	2.8	33	30.6	58	53.7	13	12.0

In table 5, it is known that by the nine aspects of observation of problem solving in

classroom management, there is a diversity of respondents' perspectives. The average result of category responses was never 1.53%, rarely 2.53%, sometimes 16.99%, often 54.02%, and always 26.53%. The tendency of actions taken in the frequent category. This action provides information that a teacher is trying well in solving problems in order to realize quality learning. If the learning problem is solved, it will help the teacher in formulating the next action [19]. Furthermore, the average, standard deviation, and category of the teachers' responses to all aspects of problem solving can be seen in table 6.

Table 6. Interpretation of Problem Solving Aspects

No.	PS	Average	SD	Category
1	Understanding various problems (P1)	4.29	0.642	Good
2	Understanding every problem (P2)	4.31	0.590	Good
3	Making the map of problem solving (P3)	3.62	0.806	Good
4	Giving and presenting solution for each problem (P4)	4.24	0.668	Good
5	Initiating various problem solving (P5)	4.11	0.702	Good
6	Discipline and persistent to put things in order (P6)	4.30	0.673	Good
7	Evaluating the impact and success of problem completion (P7)	4.07	0.680	Good
8	Identifying the symptoms that have potential towards the presence of problem (P8)	3.69	0.779	Good
9	Implementing various designed solutions (P9)	3.73	0.744	Good
	Mean	4.04	0.698	Good

The data of table 6 provides information of the nine statements showing the problem-solving aspect by the respondents. All of these data are categorized as good on its implementation of classroom management through problem-solving strategies. The average of the overall aspect is 4.04 with a good category with a standard deviation of 0.698. Based on the exposure to this data, overall teachers strive to solve problems in various activities, especially in realizing quality learning. Guaranteeing or improving quality learning is an action that seeks to optimize the quality of students. This is the best ways of investment in the future education [5].

Factor Analysis

Factor analysis is used to ensure that the problem-solving component of realizing quality learning can really be used as a basis for analysis and observation indicators. Data on the factors can help in classroom management during the implementation of learning. Factor analysis data can be seen in table 7.

Table 7. Analysis of the Aspect of Problem-Solving Factors

Aspect	1	2	3	4	5	6	7	8	9
P1	0.788a	-0.412	-0.095	-00.073	0.002	-0.132	-0.107	0.114	0.066
P2	-0.412	0.845a	0.024	-0.105	-0.095	-0.144	-0.083	0.028	-0.073
P3	-0.095	0.024	0.806a	-0.311	-0.222	0.068	0.097	0.028	-0.310
P4	-0.073	-0.105	-0.311	0.874a	-0.011	-0.167	-0.084	-0.162	0.069
P5	0.002	-0.095	-0.222	-0.011	0.877a	-0.044	-0.342	-0.009	-0.195
P6	-0.132	-0.144	0.068	-0.167	-0.044	0.871a	-0.238	0.030	-0.332
P7	-0.107	-0.083	0.097	-0.084	-0.342	-0.238	0.830a	-0.279	0.096
P8	0.114	0.028	0.028	-0.162	-0.009	0.030	-0.279	0.803a	-0.413
P9	0.066	-0.073	-0.310	0.069	-0.195	-0.332	0.096	-0.413	0.789a

Based on table 7, it can be known that the nine components which observe the problem-solving aspect in realizing qualitiy learning categorized to meet the factor analysis. All components are above 0.7 [18], [20], [21] . Following up, a validity and reliability analysis was conducted.

Validity and Reliability

Validity analysis as a reinforcing basis to measure the validity of problem-solving aspects in realizing quality learning. Valid data is a reinforcing indicator of problem solving in learning. The data for the analysis of quality, validity and reliability can be seen in tables 8 and 9.

Table 8. Quality of Validity of Problem Solving Aspects

Aspect		PS	1	2	3	4	5	6	7	8	9
P1	Pearson Correlation	0.538**	1								
	Sig. (2-tailed)	0.000									
	N	108									
P2	Pearson Correlation	0.637**	0.548**	1							
	Sig. (2-tailed)	0.000	0.000								
	N	108	108								
P3	Pearson Correlation	0.654**	0.249**	0.273**	1						
	Sig. (2-tailed)	0.000	0.009	0.004							
	N	108	108	108							
P4	Pearson Correlation	0.675**	0.317**	0.375**	0.467**	1					
	Sig. (2-tailed)	0.000	0.001	0.000	0.000						
	N	108	108	108	108						
P5	Pearson Correlation	0.734**	0.281**	0.389**	0.456**	0.381**	1				
	Sig. (2-tailed)	0.000	0.003	0.000	0.000	0.000					
	N	108	108	108	108	108					
P6	Pearson Correlation	0.740**	0.385**	0.468**	0.330**	0.442**	0.464**	1			

	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000				
	N	108	108	108	108	108	108				
P7	Pearson Correlation	0.704**	0.336**	0.407**	0.257**	0.393**	0.551**	0.523**	1		
	Sig. (2-tailed)	0.000	0.000	0.000	0.007	0.000	0.000	0.000			
	N	108	108	108	108	108	108	108			
P8	Pearson Correlation	0.654**	0.102	0.231*	0.320**	0.376**	0.405**	0.388**	.467**	1	
	Sig. (2-tailed)	0.000	0.292	0.016	0.001	0.000	0.000	0.000	0.000		
	N	108	108	108	108	108	108	108	108		
P9	Pearson Correlation	0.751**	0.202*	0.343**	0.515**	0.376**	0.523**	0.552**	0.391**	0.583**	1
	Sig. (2-tailed)	0.000	0.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
	N	108	108	108	108	108	108	108	108	108	108
**. Correlation is significant at the 0.01 level (2-tailed).											
*. Correlation is significant at the 0.05 level (2-tailed).											

The data in table 8 shows that all components have a correlation to the problem solving. Correlated data provide information that each component plays an important role in observing classroom management through problem solving in realizing quality learning. Someone who already has a good understanding and ability to solve problems can have an impact on learning [22]. Furthermore, the results of the reliability quality analysis as the basis for supporting the decision can be seen in table 9.

Table 9. Quality of Reliability of Problem Solving Aspects

Aspect	Cronbach's Alpha	Kategori
Problem Solving	0.766	Very Feasible

In table 9, it can be seen that the value of Alfa Cronbachs' (AR) is above 0.70, which is 0.766. All aspects of observation are believed to be very feasible to be used for data collection and problem solving. These aspects of problem solving can be used as classroom management strategies in learning.

Normality Test

The data aspects under observation were tested for data normality quality using the one-sample Kolmogorov-Smirnov test approach. This step is an indicator to determine the status of data analysis used to measure classroom management in solving problems to achieve quality learning. The analysis of data normality can be seen in Table 10.

Table 10. Normality Test using One-Sample Kolmogorov-Smirnov Test

Aspect	N	Asymp. Sig.	Kategori
Problem Solving	108	0.312	Normal

From Table 10, normality test results indicate a significance level above 0.05. This

score suggests that the data concerning the observed aspects of problem-solving used to achieve quality learning are normally distributed. Normal data serves as a prerequisite for observing the significance level of each aspect of problem-solving.

One-Sample T Test

To find out the effectiveness of problem solving aspects in classroom management for increasing quality learning, the data is analyzed using a one-sample t-test as a support for decision-making. The analysis of the one-sample t-test data can be seen in Table 11.

Table 11. One-Sample T Test of Problem-Solving Aspects

Aspect	t	df	Sig. (2-tailed)	Mean Difference
P1	69.396	107	0.000	4.287
P2	75.951	107	0.000	4.315
P3	46.705	107	0.000	3.620
P4	65.978	107	0.000	4.241
P5	60.897	107	0.000	4.111
P6	66.305	107	0.000	4.296
P7	62.307	107	0.000	4.074
P8	49.292	107	0.000	3.694
P9	52.129	107	0.000	3.731

Table 11 shows that all data can be considered as factors, elements, or indicators to determine learning activities through problem-solving. All data are categorized as significant because they are within the standard of 0.000 or not exceeding a significance of 0.05. Good problem-solving quality helps students achieve their learning achievements through quality learning. Without meaningful problem-solving management, the target of quality learning will not be maximized [23].

Anova Test

Anova is used to determine the variance of problem-solving aspects in classroom management during learning. The data that differentiate between each aspect are important and cannot be ignored in problem-solving. The analysis of Anova data can be seen in Table 12.

Table 12. Anova Test

	Independent Aspect	df	JK	F	Sig.
Type	Understanding various problems (P1)	1	1.074	3.859	0.000
	Understanding every problem (P2)	1	1.034	4.922	0.000
	Making the map of problem solving (P3)	1	2.179	6.418	0.000
	Giving and presenting solution for each problem (P4)	1	1.424	5.733	0.000
	Initiating various problem solving (P5)	1	1.770	7.569	0.000
	Discipline and persistent to put things in order (P6)	1	1.635	7.623	0.000
	Evaluating the impact and success of problem completion (P7)	1	1.863	10.441	0.000
	Identifying the symptoms that have potential towards the presence of problem (P8)	1	1.960	5.887	0.000
	Implementing various designed solutions (P9)	1	2.115	8.907	0.000

Table 12 data indicate significant differences for each problem-solving aspect, with significance levels of 0.000 or less than 0.05. The analysis signifies that each problem-solving aspect can be used in classroom management as a strategy to achieve quality learning. This data should be a strong consideration for teachers to pay attention to various issues that arise during teaching. These problems need to be addressed to avoid disrupting the intended goals and learning outcomes.

Coefficient of Determination

The data that differentiate each aspect of problem-solving determine the quality of the roles produced. Each aspect exerts a varied influence. The analysis data of the coefficient of determination can be seen in table 13.

Table 13. Coefficient of Determination Test (R)

Aspect	R Squared	Predictor of R Square
Understanding various problems (P1)	0.290	0.472
Understanding every problem (P2)	0.406	0.502
Making the map of problem solving (P3)	0.428	0.554
Giving and presenting solution for each problem (P4)	0.455	0.531
Initiating various problem solving (P5)	0.538	0.625
Discipline and persistent to put things in order (P6)	0.548	0.642
Evaluating the impact and success of problem completion (P7)	0.496	0.648
Identifying the symptoms that have potential towards the presence of problem (P8)	0.428	0.551
Implementing various designed solutions (P9)	0.565	0.682

The data in Table 13 indicate that each aspect of problem solving plays a role in achieving quality learning. For example, understanding various problems has an influence of 0.290 on predictor 0.472; interpreting each problem has an influence of 0.406 on predictor 0.502; creating a problem solving map has an influence of 0.428 on predictor 0.554; providing and presenting solutions for each problem has an influence of 0.455 on predictor 0.531; initiating various problem-solving approaches has an influence of 0.538

on predictor 0.625; being disciplined and persistent in addressing problems has an influence of 0.548 on predictor 0.642; evaluating the impact and success of problem-solving has an influence of 0.496 on predictor 0.648; identifying symptoms that have the potential to cause problems has an influence of 0.428 on predictor 0.551; and implementing various designed solutions has an influence of 0.565 on predictor 0.682. Meaning all aspects play a positive and significant role in advancing learning through problem-solving strategies.

4. DISCUSSION

In a learning situation, problems can occur internally from the teacher or among the students themselves. Problems can also occur externally, such as natural phenomena or from parties not directly involved in the learning process. Teachers need to provide guidance to students regarding emerging problems. The aim of the guidance is to help students take appropriate actions. The observation result that assisting students in dealing with their learning problems can enhance their confidence in making decisions [24], [25].

Students need to be involve in communication about several problems. This aims to ensure that they understand, comprehend, and interpret that each problem has a solution. This will helps students take appropriate actions. When a problem is resolved, they have more understanding and experience, thereby improving their skills and learning quality. It is explained that each problem builds knowledge and experience [26]. Constructivist theory suggests that the processes of understanding, analyzing, and interpreting an issue are effective strategies for enhancing the quality of thinking [27]. Therefore, it is essential for teachers to guide students to achieve high-quality learning.

Each student varies in how quickly they understand problems; some are quick, while others are slow, and some may not understand at all. In this kind of situations, teachers can provide logical terminology and reasoning to help students grasp the essence of the issues being addressed in the lesson [28]. Creating a map or framework for problem-solving is crucial for taking action. To achieve this, teachers must encourage students to think critically, utilizing their knowledge and experiences. If students got difficulties in designing problem-solving strategies, they should collaborate with other students or the teacher. This collaborative activity helps students explore solutions together, enabling them to make appropriate decisions [29].

Teachers are encouraged to have a problem-solving framework. This framework

serves as a benchmark against students' perspectives. If students' perspectives do not align with the problem-solving framework, teachers can reassess [30]. This is useful for presenting well-founded solutions related to the given problems. Several aspects to consider include: identifying and understanding the problem; developing effective problem-solving strategies; exploring solutions; and rethinking and redefining the problem and solutions over time[31]. These approaches can provide guidance for students.

Teachers are considered as knowledgeable figures in the learning process. Students often rely on their teachers for knowledge, experiences, and even initiatives. Armed with their knowledge and experiences, professional or creative teachers strive to introduce various initiatives to aid students in their learning. When problems arise during learning activities, students can quickly find solutions. Well-targeted and effective breakthroughs contribute significantly to learning achievements. Therefore, a teacher must continually work hard to discover and implement meaningful initiatives throughout the learning journey.

Initiatives require commitment [32]. A teacher who initiates students to solve a problem must demonstrate how to do it. The ideas provided should be actionable and not just mere fantasies. Teachers should ensure that students can implement them in real terms. For example, when teaching speed reading, creating rhymes or poems. A teacher should practice rather than just command. If there are many initiatives from either the teacher or students, the teacher should still evaluate each initiative presented. This is to determine which initiative is most suitable for solving the problem. Teachers need to avoid alternatives that touch on sensitive issues. Elements related to sensitive issues can affect students psychologically. In the end, it can disrupt both the quality and quantity of their learning [33].

Beside the alternative options for solving problems, the discipline and perseverance of teachers conducting the learning process should be noted and applied. Discipline and perseverance in handling something need practice. These efforts aim to build habits in managing the problems encountered. Teachers who are accustomed to managing problems, especially within the scope of learning, can broaden students' experiences. Consequently, teachers can easily guide their students to also organize and manage the problems they face. Through ongoing guidance, students can classify various issues they encounter [34].

Through the discipline and perseverance of teachers, one crucial aspect that cannot be left behind is evaluation. Evaluating the attitudes of both teachers and students, as well

as the impact of problems in learning, is essential for educators. Teachers can assess how far their attitudes contribute to solving these problems. This serves as a vital note for teachers to provide the best solutions to emerging issues. In the context of learning activities, teachers can make wiser decisions in presenting problems that enhance students' knowledge and experiences [35]. These steps facilitate the creation of systematic planning to achieve effective levels of knowledge, skills, competencies, and abilities [36].

Teachers evaluate every problem encountered in learning to ensure that quality is achieved effectively. They also need to identify potential issues that may arise. A teacher must be vigilant and meticulous in assessing whether to introduce a problem or not. If an issue is likely to disrupt learning activities, it should be promptly addressed. Every problem has the potential to affect students' effectiveness, including the teacher themselves. Several studies suggest that identifying priority issues beforehand is crucial in preventing problems. After identification, analyzing the symptoms that may arise from these issues helps teachers take prompt action if they indeed pose a problem [37].

Ideally, teachers already understand the psychological aspects of their students. The solutions offered should be understandable and actionable. Clear and effective verbal communication provides assurance to students that they can receive and comprehend the information. If students do not understand, teachers can try explaining in different ways. It's also possible for a teacher to utilize other students to explain solutions to the problems at hand. In this context, there are three paradigms for implementing solutions to every problem: goals, principles & processes, people and performance. These terms are simplified into the expressions of strategy (goals), structure (principles & processes), and behavior (people). They are interconnected and influence the success of learning. Strategies drive structures; structures guide behavior; and behavior influences outcomes, in a reciprocal manner (top-down). When there is a balance of influence and roles among these three elements, it becomes easier to achieve the targeted goals in learning [38].

5. CONCLUSION

The problem solving actions carried out by teachers to achieve quality learning encompass various techniques, such as understanding various problems, interpreting each problem, creating problem-solving maps, providing and presenting solutions for each problem, taking initiatives in various problem solving approaches, maintaining discipline and perseverance in handling problems, evaluating the impact and success of problem-

solving, identifying symptoms that could potentially become problems, and implementing various pre-designed solutions. Each aspect of these strategies is generally categorized as good with an average score of 4.04. All these strategy aspects are considered valid, reliable, normal, and relevant in achieving quality learning based on factor analysis. They are correlated and significantly influential with a significance value of 0.000 < 0.05. Anova tests through linear paths show that all linear paths have a significant impact on classroom management through problem solving for effective learning. This confirms that classroom management through problem solving approaches can be an effective strategy in achieving quality learning.

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