

THE INFLUENCE OF PERSONAL **DEVELOPMENT AND GROWTH MINDSET ON TEACHER PERFORMANCE AND IMPLICATIONS ON QUALITY OF** LEARNING IN PRIVATE PRIMARY SCHOOLS IN SERANG DISTRICT

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ABSTRACT

This research aims to examine the characteristics teachers must have, namely a growth mindset, or a mindset that makes them want to develop themselves constantly and have various new skills, and their influence on teacher performance and the quality of learning. Never forget that with effort, planning, and other people's support, each person can develop their fundamental traits. The present study incorporates survey methods into a quantitative research paradigm. 150 private elementary school teachers spread across 16 sub-districts in Serang Regency are used as the unit of analysis for the questionnaire measurement scale, which uses a scale of 1 to 5. SEM-PLS was used to analyze inferential statistical tests, namely inner and outer model tests. Based on the inferential analysis of the empirical research model, the outcomes of the outer model analysis demonstrate that the indicators of each latent variable yield valid and dependable results. These results show that each latent variable indicator has a high level of measurement accuracy, consistency, and reliability. In the meantime, the model's goodness of fit results demonstrate that there is a strong match between the empirical model and the ideal model. The hypothesis test revealed that the seven hypotheses were accepted. These hypotheses show how teacher performance, growth mindset, and selfdevelopment have a significant impact on the quality of learning in private elementary schools in Serang Regency. Teacher performance can also mediate the influence of self-development and a growth mindset on the quality of learning.

Keywords: Personal Development, Growth Mindset, Learning Ouality, Teacher Performance

1. INTRODUCTION

Primary school education has a vital role for the nation and state where through basic education students are equipped with basic abilities related to critical thinking, reading, writing, arithmetic, mastery of the basics for studying science and technology, and communication skills which are the minimum skills required in life social [1]. To be able to achieve this goal, high quality learning and the characteristics of quality teachers are needed [2]. One of the important characteristics of a good teacher is having a growth mindset or mindset that makes someone always want to develop and learn new skills, which has an influence on student learning through developing the personality and mindset of a quality teacher [3]. emphasized that teacher professional development is an effort in the educational process to develop teacher professional competence by adapting it to educational needs. In the world of education, teacher professional development targets the professional quality and objective performance of teachers, as well as improving teacher performance and outcomes, which can then support development by emphasizing improving the quality of teacher skills. Including teaching capacity, personal capacity, social capacity, and professional capacity [4]. Teacher professional and career development can be achieved through various programs [5]. Both programs are organized by schools and professional development and teacher professional development programs launched by the government. With this teacher professionalism and professional

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development program, it is hoped that teachers can participate actively in improving their respective skills and competencies [6].

This is due to the fact that teachers play a major role in determining the outcome of a learning process. Teachers need to be able to grow professionally and personally in order to accomplish positive learning outcomes [7]. for students and the quality of education in Indonesia is increasingly advanced [8]. This is confirmed by [9] who concluded that teacher competence and motivation have a simultaneous or partial effect on teacher performance, partial motivation has a greater influence on teacher performance and teacher professional abilities, and teachers have a positive effect on teacher teaching performance [6].

To increase competence, a teacher must have expertise in the field he/she is working in because there are demands that must be made on a teacher so that the quality of teaching in school can be achieved [10]. Fundamental changes in the character of society such as those occurring in the 21st century certainly have implications for the character of teachers. The progressive vision holds that shifts in societal norms must precede teacher transformation in the classroom [11]. If today's society has become a digital society, teachers must also immediately transform, both technically and socio-culturally. Because of information technology's rapid advancement, every industry is changing [12].

Students in the twenty-first century live in a world where information flows freely. A lot of nations are changing their objectives and methods as a result of ICT advancements and different innovations in education [13]. The educational problems facing Indonesia today are not just about finding education that can be accessed by all citizens but also about improving the quality of education [10], because the quality of education determines the quality of human resources, correlates with the wealth of the country, and Indonesia's civilization in the future [14]. The variety of student learning outcomes measures the relatively low quality of learning outcomes in Indonesia [15]. Effective learning can help students become more creative because the teaching process is associated with developing ideas, facilitating knowledge development, and encouraging creativity in addition to encouraging student learning [16].

To learn by maximizing superior achievement, teachers and researchers need continuous creativity and innovation to conduct research and develop good teaching material designs, strategies and learning supports that are supported by good academic achievement [17]. Every educational institution requires a diverse learning model that prioritizes the values of quality students in terms of knowledge, behavior, and skills [18]. Providing examples of learning support materials for Generation Z through innovative materials, teachers are expected to not only understand students' personalities but be able to determine suitable learning methods [19].

In addition, educators can design learning modeling techniques that spark curiosity and facilitate comprehension for students [15]. With the help of this content, educators can create lesson plans and implement them in the classroom. They can also choose educational resources that complement the interests and characteristics of their students [18]. Several problems related to self-development and teacher growth mindset on the quality of learning and its implications for teacher performance were explored in depth through a qualitative approach, resulting in results which the author then described in a SWOT analysis as follows on table 1:

	STRENGTH		WEAKNESSES		
1	Teachers have linear qualifications	1	Low self-awareness to develop oneself		
2	Good skills background	2	Not mastering teacher competence		
3	Concentrate on learning achievement targets	3	Unfulfilled community of practice		
4	Commitment Enjoying work	4	Minimal insight and learning experience		
5	Focus on improving the quality of education				
	OPPORTUNITIES		THREATS		
1	Increasing and developing competence through collaboration with related agencies	1	Very rapid social development		
2	Increasing teacher competency through programs provided by the Ministry of Education and Culture, Research and Technology	2	Quality of learning the level of competitive literacy and numeracy is considered still low		
3	Reflect and evaluate through education reports	3	Teachers are slow to follow IT & Artificial Intelligence developments		

 Table 1. SWOT Matrix of teacher self-development and growth mindset on learning quality and its implications for teacher performance

Based on table 1 the phenomenon above, the researcher conducted an in-depth literature review and found a common thread related to the weakness of the capacity building program which is only followed by all teachers if required and facilitated by the government [20]. Schools' impact on educators as participants in professional development [8]. The effectiveness of teaching. Teachers have not done and learned how to teach, namely how to design more activities used in the classroom so that the learning process takes place effectively [9]. Apart from that, teachers must understand how students learn. Some research gaps obtained from previous research results include the following [4].

The first research gap is seen from the gap in the results of previous research where [19] concluded that it does not have a direct significant effect on the quality of learning if the teacher has more teaching experience but is not balanced with increased competence, but it will have a significant effect if it is positive and There is a significant relationship between teaching experience and quantity in participating in training on teacher competency [1].

[21] concluded that the reduced intensity of learning and teaching and the fact that conventional methods are still widely used have a significant direct influence on the quality of learning that does not utilize technology, which reflects the existence of adaptation constraints and teacher performance, but can influence the lack of competence in using varied learning strategies. and the use of technology on the one hand, and limited access [2].

[22] concluded that teachers' understanding of various learning models, including inquiry-based learning, problem-based learning, experiential learning, task-based learning, theme-based learning, cooperative learning, project-based learning, and the flipped classroom model, is greatly enhanced when self-development training activities are implemented [23]. This kind of learning model can be used as an alternative in educating or teaching generation Z [24]. The use of technology-based learning media can be adjusted to suit learning needs [25].

[26] develop your talents, make your dreams come true, increase your self-confidence, become strong in facing trials, and have good relationships with others and improve the quality of learning [27]. This can be achieved through efforts to learn from experience, receiving feedback from others, practicing sensitivity towards oneself and others, deepening awareness, and trusting the efforts of the heart [28]. Based on this gap phenomenon and research, the researchers attempted to explore more deeply the influence of self-development, spiritual mindset on the quality of learning and its impact on teacher performance through a quantitative paradigm [29].

2. THEORETICAL REVIEW

2.1 The Influence of Personal Development on Teacher Performance

The results of research conducted by [23] which discusses teacher performance and selfdevelopment is the key to successful learning, has a significant influence on the quality of learning using a distance or online system, needs to be supported by collaboration between parents and teachers and learning also requires human assistance. old. [30] with the theme of self-efficacy, work involvement and innovative work behavior in vocational school teachers. The results of this research show that there is a significant influence of self-efficacy and work involvement on innovative work behavior, the influence of self-efficacy on innovative work behavior, and the influence of work involvement on innovative work behavior in vocational school teachers [12].

The results of research conducted by [19] which discussed the significant influence of selfdevelopment on the quality of teacher teaching found that self-development must prioritize teachers' needs for achieving standards, optimal learning quality and increasing professional competence, especially those related to the implementation of learning services. Meanwhile, research results from [31] show that career development has a positive and significant effect on teacher performance.

The results of research conducted by [21] which examined the project-based learning model to improve students' creative thinking skills. It was found that there was a significant influence on the influence of self-confidence on teacher performance. Incentives and self-assurance were also found to have an effect on teachers' performance [9]. Based on the five previous studies, there are differences in the situations and conditions that are being carried out by researchers [12]. Researchers formulate other concepts according to current conditions. Based on the results of this research, the researcher made the first hypothesis as follows.

H1: There is a positive and significant influence of self-development on the performance of private elementary school teachers in Serang Regency.

2.2 The Influence of Growth Mindset on Teacher Performance

The results of research conducted by [32] regarding the effectiveness of training in cultivating a growth mindset in teachers found significant differences in growth mindset among teachers, which increased after training and were able to increase the growth mindset of teachers. Based on research conducted by [33] who examined teacher performance and the factors that influence it, it was found that there is a significant influence on teacher performance, and it is closely related to the learning activities they carry out. For the most part, both internal and external factors affect how well teachers perform [33].

The results of research by [34] which looked at the impact of a growth mindset on grit among senior high school teachers in Purwokerto concluded that grit and growth mindset were related. According to this study, having a growth mindset helped increase grit, which in turn raised the growth mindset of high school teachers. The results of research by [35] which looked at how teacher digital competency affected teaching performance, revealed that teacher digital competency positively and significantly impacted Klaten Regency State Vocational School teachers' readiness for change. The degree to which teacher digital competence affects their preparedness for change, as well as the favorable and noteworthy indirect effects that teacher digital competence wia preparedness for change [36].

Research by [4] which looked at how job characteristics and emotional maturity affected teachers' performance discovered that the teacher emotional intelligence variable had a substantial and positive impact on teachers' performance [6]. Job characteristic variables have a positive and significant effect on teacher performance [37]. The emotional maturity variable has a positive and significant effect on teacher performance [29]. The variables of teacher emotional intelligence, job characteristics and emotional maturity have a positive and significant effect on teacher performance [16]. Based on previous research, the researcher made the second hypothesis as follows.

H2: There is a positive and significant influence of growth mindset on the performance of private elementary school teachers in Serang Regency

2.3 The Influence of Self-Development on the Quality of Learning

Self-development is an important element to achieve extraordinary success in life or a successful life as much as one desires. Self-development or individual development is summarized in one term [30]. In short, self-development is investing in ourselves so that we manage ourselves or regulate ourselves very well and efficiently [38]. According to experts, personal development is generally knowledge related to exploring one's own strengths and exploring this potential optimally [39]. The results of research from [26] which investigated the impact of educators' self-perception and pedagogical proficiency on the caliber of instruction provided in Tegal Selatan District, Tegal Regency, vocational schools. The study's findings indicate that self-concept has a substantial and positive impact on how well students learn [40].

Furthermore, the results of [30] research which examined the influence of self-development and learning supervision on teacher competence showed that there was a significant influence of teacher self-development on teacher competence both directly and indirectly. Meanwhile, the results of the third previous research were from [13] which examined the development of teacher competence in improving the quality of the learning process. The results obtained show that the success of a learning process is largely determined by a teacher to improve the quality of learning [28].

The results of research conducted by [13] talk about how good accompanying teachers are at raising the standard of early childhood education. The conclusion reached was that there is a noteworthy and practical impact on learning quality. The findings of [33] fifth study demonstrated that learning quality was positively and significantly impacted by self-development. Based on the results of previous research conducted by several of the researchers mentioned above, it can be concluded that, there is a significant influence of teacher self-development on the quality of learning [20]. Based on previous research, there are differences, namely only examining the learning process activities that take place in schools [37]. The researcher made the third hypothesis as follows.

H3: There is a positive and significant influence of self-development on the quality of learning in private schools in Serang Regency.

2.4 The Influence of Growth Mindset on the Quality of Learning

Growth mindset is a way of thinking to develop oneself so that it can influence feelings to increase intelligence and abilities [11]. Teachers with a growth mindset will be better able to overcome challenges and changes in the future. Teachers with this mindset are also always learning to improve and develop themselves [41]. In connection with the research, it is explained that nowadays, the role of the teacher is not only to carry out its function as someone who facilitates the transfer of knowledge but also to instill values and build the character of students in a sustainable manner [42].

The results of research by [44] which examined modeling the quality of teacher services based on "growth mindset" facing changes in teaching and learning activities in the new normal era showed that there was an influence of mindset and an influence of growth mindset on the quality of teacher services [2]. It was concluded that there are indicators to strengthen quality teacher services that must be supported by growth mindset indicators. In this research, there is a significant influence because growth mindset is defined as efforts made to grow teachers' mindsets to support the teaching and learning process [21].

The results of research by [14] which examined the effectiveness of growth mindset training for high school students showed that an increase in growth mindset in teachers was still visible based on changes in the mean and responses of the answers given by teachers. The limitation of this research is that only one training meeting was conducted [45]. However, there is a significant effect even though training with one meeting using the method used in this study is not enough to make a significant change in teacher growth mindset, so it takes longer or more intensive time and additional methods to provide these changes [46]. The results of [36] which examined the effectiveness of growth mindset training for high school students showed that there was a significant influence by conducting teacher growth mindset training because it was effective in increasing students' growth mindset [32]. Their life goals in the future were more focused and organized [7].

The results of research conducted by [12] which examined teacher mindset is associated with the development of students' growth mindset. Using a web-based survey pretest-posttest design. There is a significant influence because the main strength is to identify the level of stress associated with thinking about receiving feedback on teaching, insight, experience, and strategies for coping, understanding feedback for teaching and learning should be had by teachers [29]. From the five previous studies, there are differences in teachers' growth mindset views on how it influences the quality of learning [15]. Researchers

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formulate other discovery concepts to obtain solutions. Based on the results of the previous research above, the researcher made the fourth hypothesis as follows.

H4: There is a positive and significant influence of growth mindset on the quality of learning in private schools in Serang Regency.

2.5 The Influence of Teacher Performance on the Quality of Learning

The results of research by [17] which discusses teacher performance and its impact on the quality of learning, it was found that teacher performance influences the quality of learning considering that teachers are individuals who occupy an important role in education and can influence the goals of learning, namely quality quality so that they can produce students of superior quality [3]. This is in line with the results of research from [47] where they concluded that there is a positive and significant influence on teacher performance on the quality of learning in schools [43].

The results of other research conducted by [44] showed similar results where teacher performance had a positive and significant effect on the quality of learning in state schools in Madiun. [15] stated that by improving teacher performance, the quality of education will increase so that the quality of student graduation will increase significantly. This is also reinforced by the results of [43] research where teacher performance was able to improve the quality of learning during the Covid-19 pandemic [11]. Based on the results of this research, the researcher made the fifth hypothesis as follows.

H5: There is a positive and significant influence of teacher performance on the quality of learning in private elementary schools in Serang Regency.

Meanwhile, the sixth and seventh hypotheses created to test the mediating influence of teacher performance on the endogenous variable of learning quality are as follows.

H6: There is a positive and significant influence of self-development on the quality of learning through teacher performance.

H7: There is a positive and significant influence of growth mindset on the quality of learning through teacher performance.

Based on the phenomenon and previous gap research as well as a literature review of relevant previous research related to work motivation, servant leadership OCB and teacher performance, the researcher formulated a thinking framework to be tested empirically as follows:

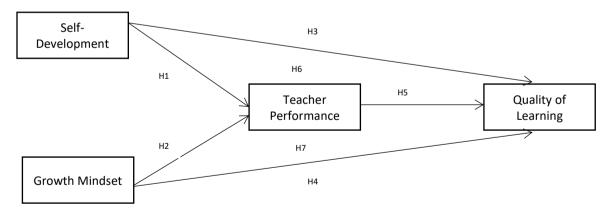


Figure 1. Framework of Research

3. RESEARCH METHODOLOGY

The population in this study was 1750 private elementary school teachers from 16 sub-districts in Serang Regency. The number of samples taken was 150 respondents considering that this research used 30 indicators to measure latent variables so that the sample size was determined by multiplying the number of indicators by the number 5 [48]. The calculation for taking the number of samples for each school uses the stratified random sampling method as seen in table 1 below. The research instrument uses a questionnaire

with a 1-5 Likert scale which has previously been tested for validity and reliability on 30 teachers. The respective indicators for the self-development variable include; recognizing one's potential in educational leadership (PD1), taking initiative according to the educational needs faced (PD2), planning self-development according to needs (PD3), planning self-development (PD4), reflecting on the results of self-development (PD5), implementing strategies self-development according to abilities (PD6), self-actualization of meaning, goals, and outlook on life (PD7).

The indicators used to measure the growth mindset variable include; Finding appropriate technology (GM1), Creating and developing practicum tools that suit your needs (GM2), Following developments in standard question-making guidelines (GM3), Participating in networks and activities of relevant teacher organizations (GM4), Managing emotions to have a positive impact (GM5), using moral principles in decision making (GM6), prioritizing a code of ethics in behavior (GM7) and implementing reward and punishment strategies in every decision making (GM8). Meanwhile, the teacher performance indicators used in this research include; Designing and implementing school programs (KG1), initiating school development programs (KG2), improving the quality of learning for students (KG3), communicating learning evaluation results (KG4), actively participating in school achievement improvement activities (KG5), being able to communicate well through oral and written (KG6) and providing examples of good behavior according to regulations (KG7). The indicators used to measure the quality of learning include; Developing a culture of student learning (KP1), communicating the school's vision and mission (KP2), evaluating program implementation periodically (KP3), managing resources according to applicable regulations (KP4), running the program by explaining the relationship between the program and the school's vision and mission (KP5), Provide feedback to motivate in implementing programs that have an impact on students (KP6), Reflect on and improve the implementation of school programs so that they have more impact on students (KP7) and Empower available school resources effectively and efficiently (KG8).

ło	Subdistrict	Techer Number	% Teacher	Sample Number
1	Ciruas	168	9,60%	14
2	Kragilan	142	8,11%	12
5	Cikande	137	7,83%	12
	Cinangka	135	7,71%	12
	Waringinkurung	121	6,91%	10
	Ciomas	115	6,57%	10
	Kramatwatu	111	6,34%	10
	Коро	109	6,23%	9
,	Baros	106	6,06%	9
D	Pamarayan	97	5,54%	8
1	Kibin	94	5,37%	8
2	Tirtayasa	91	5,20%	8
3	Carenang	83	4,74%	7
4	Bandung	82	4,69%	7
5	Binuang	81	4,63%	7
6	Anyar	78	4,46%	7
	TOTAL	1750	100%	150

Table 2. Population & Sample Data	Table	2.	Popu	lation	&	Sam	ple Data
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Source: Secondary Data Processing Results (2023)

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3. **RESULT & DISCUSSION**

The results of the outer SEM PLS analysis model showed that all indicators of each latent variable had a factor loading value above 0.70 and the cross-loading results had a value smaller than the factor loading value which shows the indicators have good validity in measuring each latent variable is as seen in the following PLS algorithm image results:

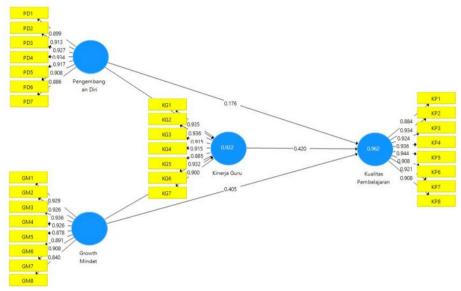


Figure 2. Outer Model Analysis Results (PLS Algorithm)

The validation test of each research model indicator is strengthened by the average variance extracted (AVE) value, namely the variance value of each indicator in the latent variable captured by that variable is greater than the variance caused by measurement errors reflected in each value. AVE is greater than 0.50 as seen in the table 3 below:

	Average Variance Extracted (AVE)	
Growth Mindset	0,819	
Teacher Performance	0,841	
Quality of learning	0,846	
Self-Development	0,832	

Source: Secondary Data Processing Results (2023)

The results of the reliability test using Composite Reliability and Cronbach's Alpha values obtained CR and Cronbach's Alpha values above 0.60, which proves that the indicators used have good reliability as seen in the table 4 below:

	Composite Reliability	Cronbach's Alpha	
Growth Mindset	0,973	0,9	68
Teacher Performance	0,974	0,9	68
Quality of learning	0,978	0,9	74
Self-Development	0,972	0,9	66

The results of the inner model analysis of the research model showed positive path coefficient values from exogenous variables to endogenous variables. The first structural equation form of the teacher performance variable shows that the self-development variable is more dominant than the growth mindset as follows: $n_1 = 0.572 \epsilon_1 + 0.406 \epsilon_2 + 0.078^{n_1}$

Meanwhile, in the second form of structural equation, it was found that the growth mindset variable was more dominant in the quality of learning compared to the self-development and teacher performance variables as shown in the following equation:

$$2 = 0,176 \epsilon_{1} + 0,405 \epsilon_{2} + 0,420 \epsilon_{3} + 0,038 2$$

The PLS Bootstrapping results obtained an R-Square value for each teacher's performance of 0.922, the learning quality variable was 0.962 as seen in the following table 5:

Table 5. Results of R	R Square	
Teacher Performance	0,922	
Quality of learning	0,962	

Source: Secondary Data Processing Results (2023)

From the results above, the R-square value for the teacher performance variable is 0.922, where this value describes the good quality of the model or goodness of fit and has a strong influence because the R2 value is > 0.67. Meanwhile, the R-square value of the learning quality variable is 0.962, where this value describes good model quality or goodness of fit and has a strong influence because the R2 value is above 0.67. The magnitude of the influence that can be explained by the self-development and growth mindset variables on the teacher performance variable is 92.2%, while the magnitude of the influence that can be explained by the self-development on the quality of learning is 96.2%.

The results of the Blindfolding analysis of Q2 predictive relevance were found for each endogenous latent variable to have a value above 0, which illustrates that the model has a good predictive relevance value. The results of the Q2 analysis for each variable can be seen in table 6 below:

Table 6. Q2 Analysis Results				
	SSO	SSE	Q ² (=1-SSE/SSO)	
Growth Mindset	1200,000	1200,000		
Teacher Performance	1050,000	244,326	0,767	
Quality of learning	1200,000	232,225	0,806	
Self-Development	1050,000	1050,000		

Source: Secondary Data Processing Results (2023)

The results above show a Q2 value of 0.767 for the teacher performance variable and 0.806 for learning quality, which means the value is > 0, so it can be illustrated that the existing predictor variables have good predictive relevance to endogenous variables. Meanwhile, the results of the twelve hypothesis tests obtained the T-Statistics and P-Values as follows on teble 7:

	T Statistics (O/STDEV)	P Values
rowth Mindset -> Teacher Performance	4,647	0,000
owth Mindset -> Quality of Learning	7,718	0,000
acher Performance -> Quality of Learning	5,602	0,000

Table 7. Results	of Significance	Test/Hypothesis Test
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Self-Development -> Teacher Performance	6,598	0,000
Self-Development -> Quality of Learning	5,588	0,000
Growth Mindset -> Teacher Performance -> Quality of Learning	3,280	0,001
Self-Development -> Teacher Performance -> Quality of Learning	4,983	0,000

Source: Secondary Data Processing Results (2023)

Based on Table 7, the results of the hypothesis test above can be interpreted as follows:. The first hypothesis, that self-development (X1) has a positive and significant effect on teacher performance (Y), was analyzed. The results showed that Ha was accepted and Ho was rejected, indicating that self-development (X1) has a positive and significant influence on teacher performance (Y) in private elementary schools in Serang Regency. The P-value of 0.000 indicates that this value is smaller than 0.05, and the T-statistics value of 6.598 indicates that this value is greater than 1.96. Test results for the first hypothesis indicate that teacher performance (Y) is significantly impacted by self-development (X1). This finding is consistent with findings from related prior research, including research findings.

The results of the analysis of the second hypothesis, where it is suspected that growth mindset (X2) has a significant effect on teacher performance (Y), obtained a P-value of 0.000, where the value is greater than 0.05, and the T-Statistics value is 4.647, where the value is greater than 1.96, so it can be concluded that Ho is rejected and Ha is accepted, which means that there is a significant influence of growth mindset (X2) on teacher performance (Y) in private elementary schools in Serang Regency. The outcomes of testing the second hypothesis demonstrate that teacher performance (Y) is significantly impacted by growth mindset (X2). These findings align with the findings of pertinent prior research, including the findings of [4], [5], [8], [14], [48].

The results of the analysis of the third hypothesis, where it is suspected that self-development (X1) has a significant effect on the quality of learning (Z), obtained a P-value of 0.000 where this value is smaller than 0.05 and a T-statistic value of 5.588 where this value is greater than 1.96, so it can be concluded that H0 is rejected and Ha is accepted, which means that there is a significant influence of self-development (X1) on the quality of learning (Z) in private elementary schools in Serang Regency. The third hypothesis's testing results demonstrate that learning quality (Z) is significantly impacted by self-development (X1). These findings align with the findings of pertinent prior research, including the findings of [14], [15], [42], [49].

The results of the analysis of the fourth hypothesis where it is suspected that growth mindset (X2) has a significant effect on the quality of learning (Z), obtained a P-value of 0.000 where this value is smaller than 0.05 and a T-Statistic value of 7.718 where this value is greater than 1.96 so it can be concluded that H0 is rejected and Ha is accepted, which means that there is a significant influence of growth mindset (X2) on the quality of learning (Z) in private elementary schools in Serang Regency. The results of testing this hypothesis show that growth mindset (X2) has a significant influence on the quality of learning (Z). These results are in line with relevant previous research results such as research results [17], [18], [34], [45], [46], [50].

The results of the analysis of the fifth hypothesis where it is suspected that teacher performance (Y) has a significant effect on the quality of learning (Z), obtained a P-value of 0.000 where this value is smaller than 0.05 and a T-Statistic value of 5.602 where this value is greater than 1.96 so it can be concluded that H0 is rejected and Ha is accepted, which means that there is a significant influence of teacher performance (Y) on the quality of learning (Z) in private elementary schools in Serang Regency. The results of testing this hypothesis show that OCB (Y) has a significant influence on teacher performance (Z). These results are in line with the results of relevant previous research such as the results of research by [6], [9], [11], [29], [33].

The results of the analysis of the sixth hypothesis, where it is suspected that work motivation (X1) has a significant effect on teacher performance (Z) through OCB (Y), obtained a P-value of 0.000, where this value is smaller than 0.05, and a T-statistic value of 4.983, where this value is greater than 1.98, so it can be concluded that H0 is rejected and Ha is accepted, which means that there is a significant influence of teacher performance (Y) in mediating the influence of self-development on the quality of learning in private elementary schools in Serang Regency.

The results of the analysis of the seventh hypothesis, where it is suspected that growth mindset (X2) has a significant effect on the quality of learning (Z) through teacher performance (Y), obtained a P-value of 0.000, where this value is smaller than 0.05, and a T-statistic value of 3.280, where the value is greater than 1.98, so it can be concluded that H0 is rejected and Ha is accepted, which means there is a significant influence of teacher performance in mediating the influence of growth mindset on learning quality.

4. CONCLUSIONS, RESEARCH LIMITATIONS AND RECOMMENDATIONS

Based on the results of empirical testing of the research model, the indicators for all latent variables tested were valid and reliable for measuring each latent variable. The results of the inner model analysis showed that the model had an excellent goodness-of-fit with a significant influence of self-development and growth mindset of 92.2% on teacher performance. In contrast, the variables of self-development, growth mindset, and teacher performance on learning quality are 96.2%. The results of testing the seven hypotheses showed a significant influence on direct and indirect influences. These results also show that teacher performance variables can mediate between self-development and a growth mindset on learning quality.

Emphasizing a growth mindset as an influence on teacher performance and quality of learning provides an idea for educational institutions to invest in their human capital and their teachers. It can be done through training interventions, mentorship programs, reflective practice sessions, and resource-sharing platforms. The study offers a multi-faceted research perspective. It examines the interplay between personal development, growth mindset, and teacher performance, contributing to a nuanced understanding of factors affecting learning quality. The sample size is substantial, having engaged 150 private elementary school teachers across 16 sub-districts. The study provides practical implications for improving quality education, teaching, and learning.

5. ACKNOWLEDGEMENTS

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REFERENCES

- K. Jailobaeva, T. Jailobaev, G. Baialieva, R. Ismanbaeva, D. Kirbasheva, and M. A. Adam, "Empowering parents and promoting school and teacher accountability and responsiveness: Case of Kyrgyzstan," *Int. J. Educ. Dev.*, vol. 103, no. September, p. 102899, 2023, doi: 10.1016/j.ijedudev.2023.102899.
- [2] L. Lingitz, V. Gallina, J. Breitschopf, L. Finamore, and W. Sihn, "Quality in production planning: Definition, quantification and a machine learning based improvement method," *Procedia Comput. Sci.*, vol. 217, no. 2022, pp. 358–365, 2022, doi: 10.1016/j.procs.2022.12.231.
- [3] K. A. Barfi, V. Arkorful, F. Appiah, E. M. Agyapong, and E. Acheampong, "The impact of blended learning on students using the IBOX platform: Initial perspectives of teachers," *Heliyon*, vol. 9, no. 3, p. e14297, 2023, doi: 10.1016/j.heliyon.2023.e14297.
- [4] I. García-Moya, M. Díez, and C. Paniagua, "Stress of school performance among secondary students: The role of classroom goal structures and teacher support," J. Sch. Psychol., vol. 99, no. December 2021, p. 101222, 2023, doi: 10.1016/j.jsp.2023.05.005.
- [5] J. R. Hanaysha, F. B. Shriedeh, and M. In'airat, "Impact of classroom environment, teacher competency, information and communication technology resources, and university facilities on student engagement and academic performance," *Int. J. Inf. Manag. Data Insights*, vol. 3, no. 2, p. 100188, 2023, doi: 10.1016/j.jjimei.2023.100188.
- [6] S. Oudman, J. van de Pol, and T. van Gog, "Effects of cue availability on primary school teachers' accuracy and confidence in their judgments of students' mathematics performance," *Teach. Teach. Educ.*, vol. 122, p. 103982, 2023, doi: 10.1016/j.tate.2022.103982.
- [7] C. Shen *et al.*, "Identifying the quality characteristics of pork floss structure based on deep learning framework," *Curr. Res. Food Sci.*, vol. 7, no. July, p. 100587, 2023, doi: 10.1016/j.crfs.2023.100587.
- [8] X. Zhang *et al.*, "High-quality super-resolution mapping using spatial deep learning," *iScience*, vol. 26, no. 6, p. 106875, 2023, doi: 10.1016/j.isci.2023.106875.

- [9] S. Falcon, W. Admiraal, and J. Leon, "Teachers' engaging messages and the relationship with students' performance and teachers' enthusiasm," *Learn. Instr.*, vol. 86, no. March, p. 101750, 2023, doi: 10.1016/j.learninstruc.2023.101750.
- [10] C. Zhang and G. Tan, "Quantifying architectural color Quality: A Machine learning integrated framework driven by quantitative color metrics," *Ecol. Indic.*, vol. 157, no. August, p. 111237, 2023, doi: 10.1016/j.ecolind.2023.111237.
- [11] S. Wang, H. Chen, W. Su, S. Cui, Y. Xu, and Z. Zhou, "Research on habitat quality assessment and decision-making based on Semi-supervised Ensemble Learning method—Daxia River Basin, China," *Ecol. Indic.*, vol. 156, no. August, p. 111153, 2023, doi: 10.1016/j.ecolind.2023.111153.
- [12] M. Candeloro, S. Carlin, M. J. Shapiro, and D. Douketis, "The Impact of an Interactive, Personalized Computer-Based Teacher Professional Development Program on Student Performance: A Randomized Controlled Trial," *Res. Pract. Thromb. Haemost.*, p. 100137, 2023, doi: 10.1016/j.jsamd.2023.100613.
- [13] E. S. Kiseleva, E. V. Yakimenko, T. G. Trubchenko, M. A. Loshchilova, I. V. Krakovetskaya, and P. A. Neverov, "Assessment of the competence development level of personal agents in the context of relationship marketing," SHS Web Conf., vol. 80, p. 01018, 2020, doi: 10.1051/shsconf/20208001018.
- [14] S. J. Livingston, S. D. Kanmani, A. S. Ebenezer, D. Sam, and A. Joshi, "An ensembled method for air quality monitoring and control using machine learning," *Meas. Sensors*, vol. 30, no. March, p. 100914, 2023, doi: 10.1016/j.measen.2023.100914.
- [15] A. Scheffelaar, M. Janssen, and K. Luijkx, "Learning as a way of achieving quality improvement in long-term care: A qualitative evaluation of The Story as a Quality Instrument," *Nurse Educ. Pract.*, vol. 70, no. March, p. 103659, 2023, doi: 10.1016/j.nepr.2023.103659.
- [16] I. Suntana and T. Priatna, "Four obstacles to the quality of constitutional law learning in Indonesia," *Heliyon*, vol. 9, no. 1, p. e12824, 2023, doi: 10.1016/j.heliyon.2023.e12824.
- [17] L. O'Neill, H. H. Lauridsen, L. Østengaard, and A. Qvortrup, "Validity evidence for the Experiences of Teaching and Learning Questionnaire (ETLQ) in evaluations of quality learning: A systematic critical literature review," *Stud. Educ. Eval.*, vol. 78, no. July 2021, 2023, doi: 10.1016/j.stueduc.2023.101283.
- [18] M. Méndez, M. G. Merayo, and M. Núñez, *Machine learning algorithms to forecast air quality: a survey*, vol. 56, no. 9. Springer Netherlands, 2023. doi: 10.1007/s10462-023-10424-4.
- [19] A. Alyami, S. F. Pileggi, and I. Hawryszkiewycz, "Knowledge development, technology and quality of experience in collaborative learning: a perspective from Saudi Arabia universities," *Qual. Quant.*, vol. 57, no. 4, pp. 3085–3104, 2023, doi: 10.1007/s11135-022-01476-9.
- [20] R. Mishra, Hemlata, and D. Trivedi, "Simulation-based learning in nursing curriculum- time to prepare quality nurses: A systematic review and meta-analysis," *Heliyon*, vol. 9, no. 5, p. e16014, 2023, doi: 10.1016/j.heliyon.2023.e16014.
- [21] L. Liu *et al.*, "Protocol to analyze fundus images for multidimensional quality grading and realtime guidance using deep learning techniques," *STAR Protoc.*, vol. 4, no. 4, p. 102565, 2023, doi: 10.1016/j.xpro.2023.102565.
- [22] P. Vakli *et al.*, "Automatic brain MRI motion artifact detection based on end-to-end deep learning is similarly effective as traditional machine learning trained on image quality metrics," *Med. Image Anal.*, vol. 88, no. May 2022, 2023, doi: 10.1016/j.media.2023.102850.
- [23] R. Hellberg and E. Fauskanger, "Learning of quality improvement theory experiences with reflective learning from a student perspective," *Int. J. Lean Six Sigma*, vol. 14, no. 6, pp. 1207– 1226, 2023, doi: 10.1108/IJLSS-04-2022-0090.
- [24] P. Nasiopoulou, E. Mellgren, S. Sheridan, and P. Williams, "Conditions for Children's Language and Literacy Learning in Swedish Preschools: Exploring Quality Variations with ECERS-3," *Early Child. Educ. J.*, vol. 51, no. 7, pp. 1305–1316, 2023, doi: 10.1007/s10643-022-01377-4.
- [25] S. Patmawati, V. M. Dewi, and M. Asbari, "THE Effect of Short-Term and Long-Term Learning in Quality Management and Innovation," *J. Inf. Syst. Manag.*, vol. 2, no. 1, pp. 21–26, 2023.
- [26] M. Ilaghi, A. Soltanizadeh, and M. Salajegheh, "Discontinuity in continuum: Transitions in medical education as a milieu for personal development," *J. Taibah Univ. Med. Sci.*, vol. 18, no. 5, pp. 1087–1088, 2023, doi: 10.1016/j.jtumed.2023.03.007.
- [27] J. A. Shepherd and M. D. Parker, "Repeat-exposure in vitro protocol to assess the risk of antimicrobial resistance (AMR) development from use of personal care products: Case study using an antibacterial liquid handwash," *J. Microbiol. Methods*, vol. 215, no. October, p. 106851, 2023, doi: 10.1016/j.mimet.2023.106851.
- [28] F. D. Moe and J. Thimm, "Personal therapy and the personal therapist," *Nord. Psychol.*, vol. 73, no. 1, pp. 3–28, 2021, doi: 10.1080/19012276.2020.1762713.

- [29] C. Nunes, T. Oliveira, M. Castelli, and F. Cruz-Jesus, "Determinants of academic achievement: How parents and teachers influence high school students' performance," *Heliyon*, vol. 9, no. 2, 2023, doi: 10.1016/j.heliyon.2023.e13335.
- [30] A. Z. Toirjonovich, "CENTRAL ASIAN JOURNAL OF Creative Self-Development of the Personality of the Future Teacher," *Cent. Asian J. Soc. Sci. Hist.*, vol. 4, no. 2, 2023.
- [31] K. Nazokat Shukhratjon kizi, "Explanation of Personal Ability and Talent Development Issues in the Works of Eastern Thinkers," vol. 02, no. 04, pp. 0–2, 2023.
- [32] N. Amgott, "The challenge was fun': Critical literacy and growth mindset in L2 multiliteracies," *System*, vol. 113, no. January, p. 103000, 2023, doi: 10.1016/j.system.2023.103000.
- [33] J. Yu, P. Kreijkes, and K. Salmela-Aro, "Students' growth mindset: Relation to teacher beliefs, teaching practices, and school climate," *Learn. Instr.*, vol. 80, no. September 2021, p. 101616, 2022, doi: 10.1016/j.learninstruc.2022.101616.
- [34] H. Krskova and Y. A. Breyer, "The influence of growth mindset, discipline, flow and creativity on innovation: Introducing the M.D.F.C. model of innovation," *Heliyon*, vol. 9, no. 3, p. e13884, 2023, doi: 10.1016/j.heliyon.2023.e13884.
- [35] A. Rajala and A. Tidström, "Examining the effects of a coopetitive mindset on SME performance: The moderating role of growth," *Ind. Mark. Manag.*, vol. 105, no. July 2021, pp. 351–358, 2022, doi: 10.1016/j.indmarman.2022.06.012.
- [36] E. Calvete, I. Orue, A. Echezarraga, N. Cortazar, and L. Fernández-González, "A growth mindset intervention to promote resilience against online peer victimization: A randomized controlled trial," *Comput. Human Behav.*, vol. 135, no. December 2021, 2022, doi: 10.1016/j.chb.2022.107373.
- [37] E. Mohammadpour and Y. Maroofi, "A performance-based test to measure teachers' mathematics and science content and pedagogical knowledge," *Heliyon*, vol. 9, no. 3, p. e13932, 2023, doi: 10.1016/j.heliyon.2023.e13932.
- [38] M. Marelli, "The law and practice of international organizations' interactions with personal data protection domestic regulation: At the crossroads between the international and domestic legal orders," *Comput. Law Secur. Rev.*, vol. 50, p. 105849, 2023, doi: 10.1016/j.clsr.2023.105849.
- [39] J. D. Vermunt, M. Vrikki, P. Dudley, and P. Warwick, "Relations between teacher learning patterns, personal and contextual factors, and learning outcomes in the context of Lesson Study," *Teach. Teach. Educ.*, vol. 133, no. July, p. 104295, 2023, doi: 10.1016/j.tate.2023.104295.
- [40] S. Shahlo Sayfulloevna, "Safe Learning Environment and Personal Development of Students," *Int. J. Form. Educ.*, vol. 2, no. 3, pp. 7–12, 2023, [Online]. Available: http://journals.academiczone.net/index.php/ijfe
- [41] T. T. Nguyet Trang and P. C. Thang, "Development and validation of Vietnam teachers' resilience scale instrument: A four-factor model," *Heliyon*, vol. 9, no. 12, p. e22730, 2023, doi: 10.1016/j.heliyon.2023.e22730.
- [42] W. Zhou, Z. Wang, F. Han, and L. Hong, "Chinese digestive surgery interns' learning quality and English reading proficiency during COVID-19 pandemic: Comparison between face-to-face versus WeChat teaching and learning," *Heliyon*, vol. 9, no. 2, p. e13434, 2023, doi: 10.1016/j.heliyon.2023.e13434.
- [43] X. Liu, T. Mearns, and W. Admiraal, "Teacher-student relationship as a lens to explore Teacher identity in an intercultural context," *Teach. Teach. Educ.*, vol. 136, no. September, p. 104379, 2023, doi: 10.1016/j.tate.2023.104379.
- [44] D. Sheng, J. Yu, F. Tan, D. Tong, T. Yan, and J. Lv, "Rock mass quality classification based on deep learning: A feasibility study for stacked autoencoders," *J. Rock Mech. Geotech. Eng.*, vol. 15, no. 7, pp. 1749–1758, 2023, doi: 10.1016/j.jrmge.2022.08.006.
- [45] D. Prasetyo and M. Asbari, "Fixed mindset versus growth mindset: Model pengembangan sumber daya manusia," *Literaksi J. Manaj. Pendidik.*, vol. 01, no. 01, pp. 215–221, 2023.
- [46] S. Wahyuni, A. Safira, and M. Pramesti, "Investigating the impact of growth mindset on empowerment, life satisfaction and turn over intention: Comparison between Indonesia and Vietnam," *Heliyon*, vol. 9, no. 1, p. e12741, 2023, doi: 10.1016/j.heliyon.2022.e12741.
- [47] E. Wiese and G. A. Nortvedt, "Teacher assessment literacy in culturally and linguistically diverse classrooms: A Norwegian case study," *Teach. Teach. Educ.*, vol. 135, no. 2016, p. 104357, 2023, doi: 10.1016/j.tate.2023.104357.
- [48] K. L. Lee *et al.*, "Assessment of deep learning-based reconstruction on T2-weighted and diffusionweighted prostate MRI image quality," *Eur. J. Radiol.*, vol. 166, no. July, p. 111017, 2023, doi: 10.1016/j.ejrad.2023.111017.
- [49] Y. Gong, G. Liu, Y. Xue, R. Li, and L. Meng, "A survey on dataset quality in machine learning," *Inf. Softw. Technol.*, vol. 162, no. September 2022, p. 107268, 2023, doi: 10.1016/j.infsof.2023.107268.

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- [50] N. Abdul-Rahaman, E. Terentev, and V. E. Arkorful, "COVID-19 and Distance Learning: International Doctoral Students' Satisfaction With the General Quality of Learning and Aspects of University Support in Russia," *Public Organ. Rev.*, vol. 23, no. 2, pp. 703–713, 2023, doi: 10.1007/s11115-022-00608-x.

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