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THE INFLUENCE OF SELF-DEVELOPMENT, POTENTIAL, AND POLICY ON THE COMPETENCE OF PE TEACHERS

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Abstract. PE (Physical Education) teachers play a role in shaping students who are physically and mentally healthy, and social. Adequate teacher competence is needed, although challenges such as self-development, technology utilization, and policy support still exist. This study analyzes the influence of self-development, potential, and educational policies on the competence of PE teachers in Pasaman Barat using the Structural Equation Modeling (SEM) method. The results showed that self-development had a significant effect on teacher competence with a coefficient of 0.585 and also increased teacher potential (coefficient 0.765). Potential plays a role as a mediation variable with a significant influence (0.442) on competence. However, education policy did not show a significant direct influence on competence (coefficient 0.015) but contributed to an increase in potency (0.119). These findings emphasize the importance of continuous self-development programs and more effective policy support to improve the competence of PE teachers.

Keywords: : Self-Development, Potential, Policy, Teacher Competence, Physical Education, SEM.

I. INTRODUCTION

Physical Education (PE) has an important role in shaping students who are physically and socially healthy (Mu'arifin et al., 2022). PE teachers are not only required to teach motor skills, but also to develop students' character and increase participation in sustainable physical activities (Faisal et al., 2023). In order to achieve this goal, PE teachers must have adequate competencies in various dimensions, such as pedagogical competence, professional competence, personality competence, and social competence (Handoyo et al., 2020). These competencies are the key for teachers to carry out their duties and responsibilities effectively, so that they can create a conducive and attractive learning environment for students (Channa & Sahito, 2022).

However, based on observations in Pasaman Barat, the competence of PE teachers still faces several challenges. Most teachers have difficulties in designing learning that suits the characteristics of students and in utilizing information and communication technology (ICT) to improve the quality of learning. In addition, personality and social aspects also need to be improved, especially in terms

of emotional management and interaction with students' parents. This condition shows that the development of PE teacher competencies does not only depend on teachers' personal abilities, but also on the support of education policies and sustainable self-development.

Self-development is one of the important factors in improving teacher competence. Through training, workshops, and further education, teachers can continue to hone the skills and knowledge necessary to become effective educators (Polyiem & Nuangchalerm, 2022). Self-development provides opportunities for teachers to adapt to the latest developments in the world of education, including the use of technology in learning and the application of innovative teaching methods. Teachers who are active in self-development tend to have better competence in designing and implementing effective learning (Vikulova et al., 2020).

In addition to self-development, individual potential also plays a significant role in improving teacher competence. This potential includes motivation, dedication, creativity, and adaptability (Narenji Thani et al., 2022). Teachers who are highly motivated tend to be more proactive in seeking

development opportunities and are more committed to improving the quality of learning. This potential can be the main driver for teachers to continue learning and innovating, so as to be able to create a more attractive and effective learning environment for students (Fairman et al., 2022).

Education policies, both implemented by the government and schools, also have an important role in improving teacher competence. Policies that support teacher professional development, such as the provision of training programs, workshops, and incentives for outstanding teachers, can encourage teachers to continue to improve their competence (Nurulloh et al., 2020). In Pasaman Barat, more effective policy support is needed to accelerate the improvement of PE teacher competence, especially in terms of educator certification and continuous professional development. Good policies will create a conducive environment for teachers to develop and reach their maximum potential.

Therefore, it shows that self-development, individual potential, and educational policies are key factors that interact with each other in influencing teacher competence. Therefore, this study aims to analyze the influence of self-development, policies, and potential on the competence of PE teachers in Pasaman Barat, as well as provide recommendations to improve the quality of physical education in the area

II. METHODS

This study uses a quantitative approach with the Structural Equation Modeling (SEM) method to analyze the relationship between the variables involved, namely self-development, policy, potential, and teacher competence (Hair et al., 2019). SEM was chosen because it is able to analyze complex relationships, both directly and indirectly, between the variables involved (Hair et al., 2021a). In this conceptual framework, potential plays a role as an intervening variable that bridges the influence between self-development and policy on teacher competence.

The conceptual framework of this research can be seen in Figure 1. This figure shows the relationship between the variables of self-development, policy, potential, and teacher competence. Self-development and policies have a direct influence on teacher competence, while the potential plays a role as an intervening variable that bridges this influence.

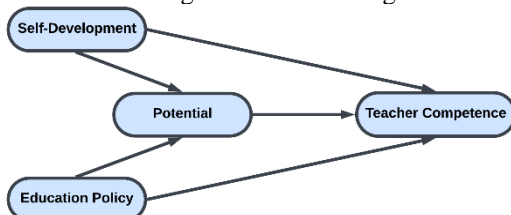


Figure 1. Conceptual Framework

The population in this study is all PE teachers in Pasaman Barat Regency. The sampling technique used is purposive sampling, with the criteria of teachers who teach

at the high school level and have at least three years of experience. The number of samples taken was 44 PE teachers, who were considered representative to get an overview of the competence of teachers in the region.

The instrument used in this study is a questionnaire consisting of several parts. The first part is self-development (SD), which measures teachers' involvement in various activities such as training, workshops, and further education (Polyiem & Nuangchalerm, 2022). The second part is education policy (EP), which aims to measure teachers' perception of policy support provided by the government and schools in professional development efforts (Nurulloh et al., 2020). The third part is potential (PT), which measures the aspects of motivation, dedication, and creativity possessed by teachers in carrying out their duties (Ridwan & Nikmah, 2022). The last section is teacher competence (TC), which measures teachers' abilities in terms of pedagogical, professional, personality, and social competence (Huang et al., 2020). Each variable was measured using a Likert scale of 1-5, where 1 indicated "Strongly Disagree" and 5 indicated "Strongly Agreed". This questionnaire is tested for validity and reliability before being used for data collection.

Each variable was measured using a Likert scale of 1-5, where 1 indicated "Strongly Disagree" and 5 indicated "Strongly Agreed". This questionnaire is tested for validity and reliability before being used for data collection. Data was collected through the dissemination of questionnaires directly to PE teachers in Pasaman Barat. Before the dissemination, socialization was carried out about the purpose of the research and how to fill out the questionnaire so that respondents understood the context and importance of their participation in this research.

The collected data was analyzed using the SEM method with the help of SmartPLS 4 software. SEM allows researchers to test models involving latent variables and manifest variables, as well as to identify direct and indirect influences between variables. The direct influence in this study involves the relationship between self-development and policy on teacher competence (Hair et al., 2021). Meanwhile, indirect influence occurs when self-development and policies affect teacher competence through potential as an intervening variable. By using SEM, researchers can obtain a more comprehensive understanding of the relationship between variables, both direct and through mediation channels, so that they can clearly describe how these factors influence each other in improving the competence of PE teachers in Pasaman Barat.

This SEM model will test five main hypotheses in the study. Self-development has a positive and significant influence on teacher competence (H1). This shows that the better the self-development carried out by the teacher, the higher the competence he has (Vikulova et al., 2020). Policies also have a positive and significant effect on teacher competence (H2), which means that supportive policies can improve teachers' competence in carrying out their duties (Fauth et al., 2019). Self-development has a positive and significant effect on potential (H3), which shows that self-development activities can increase teachers' potential in

terms of motivation, creativity, and adaptation (Madin et al., 2022). Education policies also have a positive and significant effect on the potential of teachers (H4), where policies that support professional development can strengthen the potential possessed by teachers (Baran et al., 2019). In addition, potential plays a role as an intervening variable between self-development, policy, and teacher competence (H5), which means that the potential becomes a bridge that strengthens the influence between self-development and policy on improving teacher competence (Ulfah et al., 2024).

III. RESULTS

The results of this study are shown in Figure 2, which is the output of SEM analysis using SmartPLS software. This figure illustrates the relationship between variables which includes PD, KP, PT, and KG. Each indicator of these variables is also displayed with an outer loading value that shows the validity of the indicator in measuring its respective construct. In addition, the value between latent variables is also displayed, which represents the strength and direction of influence between variables.

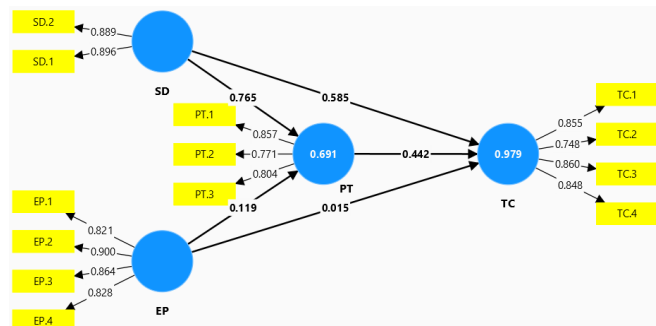


Figure 2. Output PLS SEM

Based on the results of the SEM analysis shown in Figure 2, self-development (SD) has a significant influence on teacher competence (TC) with a coefficient value of 0.585, which shows that the higher the self-development carried out by teachers, the better the competencies they have. In addition, education policy (EP) has an insignificant influence on teacher competence with a coefficient value of 0.015. This indicates that although education policy plays a role in improving teacher competence, its influence is not strong enough in this context.

Potential (PT) acts as a significant intervening variable between self-development and teacher competence with a coefficient value of 0.442. This shows that the potential of teachers plays an important role in strengthening the influence of self-development on competency improvement. In addition, the results also showed that self-development had a significant influence on potential with a coefficient value of 0.765, while education policy also affected potential although with a smaller and insignificant influence (coefficient of 0.119).

Table 1 displays the validity and reliability of each construct measured through outer loading, Cronbach's alpha,

Composite Reliability (rho_c), and Average Variance Extracted (AVE) values (Afthanorhan et al., 2021). Based on Table 1, the indicators of self-development variables (SD), education policy (EP), potential (PT), and teacher competence (TC) have an outer loading value above 0.70, which shows good validity. In addition, Cronbach's alpha value for each variable is also above 0.70, which indicates that this research instrument has adequate reliability. A Composite Reliability (rho_c) value of more than 0.70 and an AVE of more than 0.50 indicates that each construct has good internal consistency and convergent validity.

Table 1. Validity and Reliability

Variabel	Indicator	Outer Loading	Cronbach's Alpha	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
Self-Development (SD)	SD.1	0.896	0.746	0.887	0.797
	SD.2	0.889			
Education Policy (EP)	EP.1	0.821	0.881	0.915	0.729
	EP.2	0.900			
	EP.3	0.864			
	EP.4	0.828			
Potential (PT)	PT.1	0.857	0.741	0.852	0.659
	PT.2	0.771			
	PT.3	0.804			
Teacher Competence (TC)	TC.1	0.855	0.848	0.898	0.687
	TC.2	0.748			
	TC.3	0.860			
	TC.4	0.848			

Table 2 displays the results of the analysis of the validity of discrimination using the Fornell-Larcker criterion (Hamid et al., 2017). The validity of discrimination is assessed by looking at whether the square root of the AVE for each construct is greater than the correlation between that construct and other constructs. Based on Table 2, all constructs meet the criterion of discriminatory validity because the square root value of AVE, which lies at the diagonal of the table, is greater than the correlation value between constructs. This shows that each construct has good discriminatory validity and can be clearly distinguished from other constructs.

Table 2. Validity of the Fornell-Larcker Criminal Code

	EP	PT	SD	TC
EP	0.854			
PT	0.504	0.812		
SD	0.504	0.825	0.893	
TC	0.532	0.932	0.957	0.829

Furthermore, Figure 3 displays the results of the bootstrapping test used to assess the significance of the influence between variables in the model. This figure depicts the p-value for each path in the model, where values smaller than 0.05 indicate a significant influence. Based on Figure 3, the influence of self-development on teacher potential and competence, as well as the influence of potential on teacher competence, are all significant with a p-value of 0.000. On

the other hand, the influence of education policy on teacher potential and competence was not significant with p-values of 0.219 and 0.520.

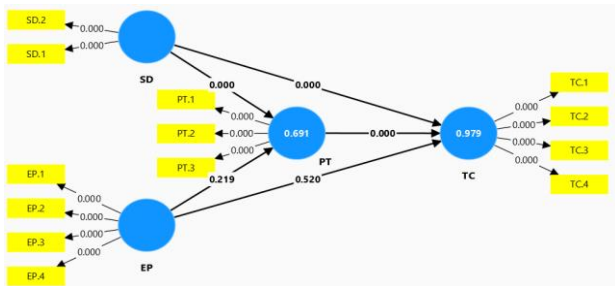


Figure 3. Bootstrapping Test Results

The results of the hypothesis test for the direct influence between variables are shown in Table 3. Based on Table 3, the direct influence of self-development on teacher competence (SD -> TC) is significant with a T-statistical value of 14,416 ($p < 0.05$), which shows that self-development plays an important role in improving teacher competence. Education policy (EP) did not have a significant influence on teacher competence (T-statistic 0.644, $p > 0.05$), while the influence of policy on potential was also not significant (T-statistic 1.230, $p > 0.05$). Self-development had a significant influence on potential with a T-statistic of 10.217 ($p < 0.05$), which showed that self-development activities directly increased teachers' potential.

Table 3. Results of the Direct Influence Hypothesis Test

Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ((O/STDEV))	P values
0.015	0.016	0.023	0.644	0.520
0.119	0.121	0.097	1.230	0.219
0.585	0.584	0.041	14.416	0.000
0.765	0.771	0.075	10.217	0.000
0.442	0.440	0.042	10.576	0.000

The results of the hypothesis test for the indirect influence between variables are shown in Table 4. Based on Table 4, the indirect influence of education policy on teacher competence through potential (EP -> PT -> TC) was not significant with a T-statistical value of 1,204 ($p > 0.05$). On the other hand, self-development has a significant indirect influence on teacher competence through potential (SD -> PT -> TC) with a T-statistical value of 8,034 ($p < 0.05$). This shows that potential plays an important role as a mediating variable that connects self-development with teacher competence.

Table 4. Results of the Indirect Influence Hypothesis Test

Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ((O/STDEV))	P values
0.053	0.054	0.044	1.204	0.228
0.338	0.339	0.042	8.034	0.000

IV. DISCUSSION

The results of this study show that self-development and potential are the main factors that have a significant influence on the improvement of PE teacher competence in Pasaman Barat. The significant influence of self-development on teachers' potential and competence indicates that training, workshops, and other development activities have a positive impact on the quality of teacher performance. This finding is in line with previous research conducted by Sancar et al. (2021), which stated that teachers' professional development contributes directly to improving the quality of learning and teaching ability. This research is also consistent with the results obtained by Zia et al. (2020), where continuous self-development is one of the keys to success in improving the quality of education.

Education policy, on the other hand, does not show a significant influence on teacher competence directly, although there is a positive influence. This can be caused by limited policy implementation or lack of support felt by teachers. These findings are similar to research conducted by Naidoo (2019), which highlights that education policies that are not well supported by school management and stakeholders tend to be ineffective in improving the quality of teachers. However, the influence of policy on potential showed positive although insignificant results, indicating that there is potential for improvement if policy is more focused on aspects relevant to teacher needs.

Teacher potential was found to have a significant role as an intervening variable between self-development and teacher competence. These findings suggest that potentials such as motivation, creativity, and dedication are important elements that mediate the relationship between self-development and competence. These results support research conducted by Gümüş et al. (2022), which emphasizes the importance of self-efficacy in mediating the relationship between skill development and performance. Thus, the development of teachers' internal potential can be the main focus in teacher competency improvement programs.

The implication of these findings is the need for more targeted policy interventions to support teachers' self-development and potential. Policies that are only administrative in nature without providing real support to teachers will not be effective in improving the quality of teaching. Therefore, it is recommended that the government and schools improve professional development programs that are relevant to the needs of teachers, provide adequate incentives, and ensure assistance and support during the teacher self-development process. In addition, it is important for teachers to continue to explore their potential by participating in training and development in accordance with current educational developments.

Overall, the results of this study confirm the importance of self-development and individual potential in improving the competence of PE teachers in Pasaman Barat. The development of policies that are more supportive and relevant to the needs of teachers in the field can be a strategic step to increase the effectiveness of physical education in this region. Thus, planned and focused

interventions can have a more significant impact on the overall quality of education.

V. CONCLUSIONS

This study shows that self-development and individual potential have a significant impact on improving the competence of PE teachers in Pasaman Barat. Self-development, through training and other development activities, was found to enhance both teacher competence and potential. Teacher potential, such as motivation, creativity, and dedication, also plays an important role as an intervening variable that strengthens the relationship between self-development and teacher competence. While education policy has a positive influence, its direct impact on teacher competence is not significant, possibly due to limited policy implementation or a lack of support felt by teachers.

The implications of these findings highlight the need for more focused and supportive policies to foster professional development and enhance individual potential. Policies that are merely administrative without tangible support will not be effective in improving teaching quality. Therefore, it is recommended that the government and schools improve professional development programs that are relevant to teachers' needs, provide adequate incentives, and offer ongoing support throughout the teacher development process. Continuous development of teachers' potential through training is also essential for significantly improving their competence

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