



The Effect of School Culture of Certified Teacher Educators and Principal Academic Supervision on Pedagogical Competence

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ABSTRACT

The pedagogical competency of teachers in carrying out their duties has an impact on the quality of education at the school level (learning). Therefore, the pedagogical competence of teachers is one of the important factors in achieving educational success. In accordance with Government Rule No. 74 of 2008 pertaining to educators, it is stated that the ability of educators to oversee students' learning, which involves a thorough comprehension of the fundamentals of education, is known as pedagogical competence. This not only improves the quality of education but also contributes to achieving greater educational goals in society. The ability to understand students is not just about knowing their academic abilities, but also includes emotional, social, and cultural aspects that shape their learning experiences. The purpose of this research is to 1) determine the influence of the school culture of certified educator teachers on pedagogical competence, 2) determine the influence of academic supervision by the principal on pedagogical competence, 3) determine the influence of school culture of certified educator teachers and academic supervision on pedagogical competence. The pedagogical competence of certified educators in Tegal has several issues, including certain teachers are still learning about assessment and lack time discipline, suboptimal teaching preparation, unoptimized learning preparation, inadequate classroom management, and the need for teachers to improve varied teaching strategies to create an enjoyable and memorable learning atmosphere for students. This study employs a quantitative approach. A questionnaire is used as the research tool in the data collection method. The research location is at SMK Bhakti Praja, Tegal Regency. This study's sample was composed of 60 certified educators. The results of this study indicate that 10.7% of teachers' pedagogical competence is influenced by school culture, the academic supervision of the principal influences 10%, and 17% is influenced by both school culture and academic supervision simultaneously. The findings of this study show that: 1) School culture partially affects pedagogical competence, 2) academic supervision partially affects pedagogical competence, and 3) School culture and academic supervision simultaneously affect pedagogical competence.

Keywords: school culture, academic supervision, pedagogical competence

INTRODUCTION

Educational institutions make several efforts to improve the quality of education, including enhancing school culture. School Culture is an organizational culture in the context of educational units. (sekolah). In the Great Dictionary of the Indonesian Language, culture is characterized by ideas, traditions, anything that has grown, and something that has been ingrained and hard to break. Culture can be seen as a behaviour, values, way of life, and lifestyle to adapt to the environment, and at the same time, a way to view and solve problems.

The numerous cases of violence against children occurring in educational institutions need to be a concern for all parties, including students, educators, educational staff, and the community within the educational institution. Because educational institutions are the second place for children to spend their time. Therefore, educational institutions must be a safe and comfortable place for children. Whatever form of violence occurs in the educational environment must be prevented and addressed properly. Because such violence not only has a negative impact on children in obtaining a proper education but also adversely affects their mental health. To prevent and address violence against children in educational institutions, the government through the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia (Kemendikbudristek) has enacted Permendikbudristek No. 46 of 2023 concerning the PPKSP.

An effective school culture consists of values, opinions, and actions resulting from a collective agreement that fosters the commitment of all personnel to adhere them consistently and coherently. School culture, as a distinctive characteristic of the school that may be recognized by the principles it adheres to the attitudes it possesses, the habits it displays, and the actions demonstrated by all school personnel, forming a unique unity within the school system. According to Daryanto (2015:6), a good culture will effectively produce the best performance at: (a) each individual, (b) work groups or work units, (c) the school as an institution, and (d) the synergistic relationship between these three levels of performance.

The school culture at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru plays a crucial part in improving the caliber of education. Cultural intervention is executed on the school culture, which will subsequently change the teacher culture, especially certified educators at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru. The

change in teacher culture can lead to changes in the process of teaching and learning. The impact of cultural intervention can be seen in student learning outcomes. Therefore, the cultures possessed by SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru must be understood and involved in the series of changes to improve the quality of education. The function of supervision at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru should not merely be about control, checking whether all activities of certified teachers have been carried out according to the outlined plans or programs, but more than that. Supervision at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru should encompass a broad understanding, especially for certified educators. The supervision activities at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru should include determining the conditions or requirements, both personnel and material, necessary to create an effective teaching and learning environment, and efforts to meet those requirements.

As quoted on the page <https://www.detik.com/edu/sekolah/d-7453288/fsgi-rilis-data-kekerasan-di-sekolah-banyak-kekerasan-seksual-yang-pelakunya-guru>. Accessed November 12, 2024, at 12:15 PM. The Secretary-General of FSGI, Heru Purnomo, and the Chairperson of the FSGI Expert Council, Retno Listyarti, reported that the highest cases of violence occurring in educational units are physical violence, followed by sexual violence by teachers. "Sexual violence (20%) with all perpetrators being teachers; Policies containing violence (0.06%)," wrote the FSG report in a written statement received by detikEdu on Tuesday (23/7/2024).

Several cases in the media also show the existence of teachers' behavior that does not comply with the rules, laws, and norms prevailing in society. Among them, 11 female students from SMKN 56 Jakarta claimed to be victims of sexual harassment allegedly committed by a cultural arts teacher at the vocational school, and the case has been reported to the school authorities. Jakarta (ANTARA, 8 Oktober 2024).

LITERATURE REVIEW

School Culture

In Law No. 14 of 2005 concerning Teachers and Lecturers : According to the definition, a Teacher is a qualified instructor whose main duties are to teach, mentor, oversee, train, assess, and evaluate students in early childhood education through formal education, basic education, and secondary education. Professional in this context refers to a job or

activity performed by an individual that serves as a source of livelihood, requiring expertise, skill, or proficiency that meets certain quality standards or norms, and necessitating professional education. Another legal basis is the National Education Minister Regulation No. 18 of 2007 concerning Certification for Teachers in Position, which was established on May 4, 2007. Furthermore, Government Regulation Number 74 of 2008 concerning Teachers, Chapter II, Article 2, states that teachers are required to have Academic Qualifications, competencies, Educator Certificates, be physically and mentally healthy, and possess the ability to achieve national education goals.

According to Stolp and Smith, school culture is defined as the history of patterns of meaning delivery, which includes norms, values, beliefs, rituals, traditions, and myths. This could be the factors that distinguishes the various member levels in school communication. People's thoughts and behaviours are frequently influenced by this system.

According to Ajat Sudrajat (2011:13) quoting Nursyam's opinion, there are at least three cultures that need to be developed in schools, namely academic, socio-cultural, and democratic. These three cultures must become a priority ingrained in the school environment. First, the academic culture.

According to Ki Hajar Dewantara, the purpose of human culture is for the safety and happiness of humans in their struggle for life. In society, culture is influenced by its members on one hand, but on the other hand, the members of society are influenced by culture.

School Culture as a formal educational institution consists of Teachers/Educators and Students/learners, as well as administrative staff. Between them, there has been a very close relationship, both between students and teachers, students with fellow students, as well as teachers, and students with other school members. Teachers, as educators, with their authority in social interactions, guide students as their pupils towards maturity.

According to Neprializa (2015: 421-422), utilizing daily interactions in education is the best and most effective way to shape character, and in this way, the gap between educators, educational staff, and students disappears. The relationship between students also creates an educational atmosphere. Fellow students befriend each other, exercise together with the applicable rules, invite and be invited, share stories, and discipline themselves to avoid hurting their peers' feelings. In the school environment, an individual is also faced with a broader life orientation pattern. Where those activity devices are not found within the family. Principally, viewing school as an organized space in which there are quite complex

roles, it has learned to recognize life orientations towards learning and preparation for assuming the status of adults.

School is a miniature society that has quite complex roles and implements stricter patterns of regulations. A place where the process of teaching skills and various standards of knowledge will be absorbed and understood by students to play their roles in life at the stage of adulthood. School cultural values need to be planned to create good relationships between teachers and students as well as among students within the school environment.

School culture can be measured by achievements in its indicators. Among them are showing noble attitudes and behaviours, having a high commitment, creating a sense of family, harmony, and closeness in relationships, providing freedom, respecting norms, supporting initiatives, and receiving attention and appreciation.

The process of awarding educators a certificate is known as teacher certification. Teachers who have fulfilled the professional requirements for teachers are granted the educator credential to create a high-quality educational system and practices professional teachers are a must. The educator certificate is a certificate signed by the certifying higher education institution as formal recognition of the teacher's professionalism, given to teachers as professional staff.

Certified educators must be able to become creative teachers, so they can perform their duties, roles, and functions professionally. According to Daryanto (2015:143-144), there are several characteristics that must be strived for to be considered a creative teacher, namely: being able to expose students to things that can help learners in their studies; being able to involve them in all learning activities; being able to provide motivation for students both verbally and non-verbally; being able to develop learning strategies (application of approaches, methods, models, and techniques) in the learning process that meet the needs of students and the nature of the material.

Academic Supervision by the Principal

Academic supervision is a several task aimed at assisting educators in honing their skills in overseeing the educational process, thereby enhancing their professional competence, particularly in managing the learning process with the purpose of improving the quality of education.

According to Mukhtar and Iskandar (2013), in general, the term supervision means observing, overseeing, or guiding and stimulating activities carried out by others with the aim of making improvements. The foundation of supervision is the idea that everyone involved should work together to develop, with the supervisor serving as the leader.

The concept is founded on the idea that everyone involved must work together to better, with the supervisor as the leader. The implementation of supervision according to Sahertian (2008) uses supervision achievement indicators, including Class Visits, Class Observations, Personal Conversations, Intervisitation, Supervision Bulletins, Teacher Meetings, Teacher Group Studies, and Workshops.

The results of Winarno's (2021) research show that academic supervision can enhance teachers' professionalism in pedagogical competence, personal competence, professional competence, and social competence. The principal is capable to organizing the supervision program well, carry out standard supervision, and conduct follow-up supervision according to the requirements of the educators, especially in raising the caliber of their instruction. (Nurlaili et al., 2021).

Pedagogical Competence

According to Musfah (2017:90), one of the skill that must be possessed by a teacher is pedagogical competence. Pedagogical competence is a capability that a teacher must possess in carrying out the learning process, related to the teacher's understanding in planning and managing the learning process. Pedagogical competence is the main foundational ability in conducting the learning process, because in the learning process, the teacher must have the ability to manage learning, the capacity to design and out the educational process, and assess learning results. Therefore, in teaching, a teacher must possess competence, as well as skills and abilities.

The principal, the institution, and the teachers themselves are continuous elements in making endeavour to enhance the pedagogical competence of teachers in the process of teaching and learning. So that the factors that become obstacles can be identified and their solutions can be sought together immediately. In conducting their duties as educators, teachers do not work alone, but rather provide input and share experiences with one another.

METHODOLOGY

This study uses a quantitative research approach with a survey method. The survey research is intended to explain relationships and test hypotheses. The research locations are SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru in Tegal Regency. The sample in this study consists of 20 certified educators from SMK Bhakti Praja Slawi and 40 from SMK Bhakti Praja Dukuhwaru. The data collection instruments used were questionnaires and documentation. Validity and reliability tests are used in instrument testing. Normality and linearity checks are used in prerequisite testing. Simple regression and multiple regression tests are used in hypothesis testing.

RESULTS AND DISCUSSION

Validity and Reliability Test

The validity test of an instrument is a process aimed at measuring the extent to which an instrument (such as a questionnaire, test, or other measuring tools) can measure what it is supposed to measure.

There are two ways to determine if a questionnaire is considered valid: (1) if the calculated $r_{\text{value}} > \text{table } r_{\text{value}}$, (2) if the total significance value (sig. 2-tailed) < 0.05 , then the questionnaire is valid, and conversely, if the significance value > 0.05 , then the questionnaire is not valid.

The results of the analysis using the SPSS v.25 application on the school culture questionnaire trial show that out of 60 statement items, 56 items are declared valid. Where the r_{table} value is 0.2542, as shown in the table below:

Table 1: Summary Table of School Culture Validity and Reliability Test

Sub Variabel	Count Valid	Valid	Invalid	Reliable
Sub Variable Exemplary	10	8	2	Not Reliable
Sub Variable Responsibility	10	10	0	Reliable
Sub Variable Responsibility	10	10	0	Reliable

Sub Variable Individual	10	10	0	Reliable
Autonomy				
Sub Variable Norm	10	9	1	Not Reliable
Sub Variable Support	10	9	1	Reliable
Total	60	56	4	Reliable = 4 Not Reliable = 2

From the table above, it can be seen that there are 56 valid items and 4 invalid items. Or 93.33% of the items are declared valid (the calculated value $r_{hitung} > r_{tabel}$, namely > 0.2542) and 6.67% of the items are declared invalid (< 0.2542). Thus, the questionnaire can be used as a tool to find influence in the research.

Table 2: Results of the Reliability Test for the School Culture and Pedagogical Competence Variables

Variabel	Result Cronbach's Alpha	Minimum Requirement Cronbach's Alpha	Criteria
School Culture	0.842	0.70	Reliable
Pedagogical Competence	0.869	0.70	Reliable

Looking at the results in Table 2, the school culture variable has a Cronbach's Alpha value of $0.842 > 0.70$, thus it is declared reliable. The pedagogical competence variable has a Cronbach's Alpha value of $0.869 > 0.7$, thus it is declared reliable. When adjusted according to the reliability level table, the reliability criteria for the school culture variable towards the pedagogical competence variable falls under "very reliable" because the Cronbach's Alpha result is in the 0.801-1.00 scale.

Hypothesis Test

The Influence of School Culture on Pedagogical Competence at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru, Tegal Regency

Based on descriptive statistics, school culture shows that there are 11 teachers (18.33%) with very good school culture scores in the range of > 93.4 , while 48 teachers (80%) have good school culture scores in the range of $67.3 - 93.4$. Additionally, there is 1 teacher (1.67%) with a low school culture score in the range of <67.3 .

The correlation analysis yielded a value of 0.327. This indicates that a relationship exists or correlation between the school culture variable (X_1) and pedagogical competence (Y) at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru.

Table 3: ANOVA Table for Testing the Significance of Single Regression of School Culture Variable on Pedagogical Competence

Anova ^a				
Model	Sum of Squares	df	Mean Square	Sig.
1 Regression	420.212	1	420.212	6.936 ^b
idual	3513.958	58	60.585	
Total	3934.170	59		

a. Dependent Variable: Pedagogical Competence

b. Predictors: (Constant), School Culture

The outcome of the ANOVA test on school culture against pedagogical competence obtained a significance value of $0.011 < 0.05$. Meanwhile, the $F_{\text{calculated}}$ value $> F_{\text{table}}$, namely $6.936 > 3.15$. This result means that H_0 is rejected and H_a is accepted, thus the hypothesis in the study stating that "there is an influence of school culture on pedagogical competence at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru" is accepted.

Table 4: Coefficient of determination of School Culture on pedagogical competence**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.327 ^a	.107	.091	78367

a. Predictors: (Constant), School Culture

Next, to determine the extent of the influence of school culture on pedagogical competence, the coefficient of determination R-Square value expressed as a percentage indicates that the R-Square value is 0.107. This result means that 10.7% of pedagogical competence is influenced by school culture, while the remaining 89.3% is impacted by additional variables not examined in this study.

Table 5: Simple Regression Results of School Culture Variable on Pedagogical Competence

Model	Coefficients ^a			
	Unstandardized Coefficients		Standardized Coefficients	
	B	Std. Error	Beta	t
1 (Constant)	48.381	9.827		4.923
School Culture	.304	.1157	.334	2.63

Dependent Variable: Pedagogical Competence

The results of the regression coefficients of school culture on pedagogical competence yield the regression equation model: $Y = 48.381 + 0.304X_1$, which can be interpreted that when the value of school culture is 0, pedagogical competence has a value of 48.381, assuming an increase in the regression coefficient of the school culture variable by 0.304. Thus, it can be said that the quality of pedagogical competence is influenced by the quality of school culture. The better the school culture, the higher the pedagogical competence. Conversely, if the school culture is poor, the pedagogical competence of

certified educators at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru will also decline.

The outcome of this study are also in line with the studies that were carried out by Nunuk (2022), which showed the results of the ANOVA test on school culture against teacher performance, where the analysis yielded a significance value of $0.000 < 0.05$. Meanwhile, the F_{count} value was $254.551 > F_{\text{table}} 4.03$. This result means that H_0 is rejected and H_a is accepted, thus the hypothesis in the study stating that "there is an influence of school culture on teacher performance at the Hasanudin Cluster Elementary School, Kaliori District, Rembang Regency" is accepted.

School culture always influences teachers' pedagogical competence because school culture has values that are adhered to, thus becoming a reference and culture in carrying out work actions and the teaching and learning process at school. According to Susanto (2016:196), school culture functions to transmit all forms of behavior from all members of the school. It also serves as the school's identity. The identity can take the form of the curriculum, school regulations, school logo, rituals, uniforms, and so on. That culture is not created instantly by the school, but through various processes that are not short.

A good school culture will foster good pedagogical competence, which will in turn impact the improvement of education quality. The success of teachers in implementing school culture will enhance the quality of student and be able to nurture and develop students' talents and interests. Thus, school culture is one of the important factors in enhancing the pedagogical competence of certified educators at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru, Tegal Regency.

Several previous studies by Widiyanti et al. (2018) indicate that there is an impact of school culture on the effectiveness of teachers, particularly in teaching and learning activities. In order to address the issues of teacher performance related to internal problems, efforts from educational institutions, teachers, and school principals are needed by changing policy programs to achieve efficient and effective education quality, focusing on student results and the educational process.

The Influence of Academic Supervision of Pedagogical Competence by the Principal at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru, Tegal Regency

Based on descriptive statistics, the principal's academic supervision shows that 19 teachers (31.67%) have very good academic supervision scores in the range of 91-100, while 30 teachers (50%) have good academic supervision scores in the range of 81-90. Additionally, 2 teachers (3.33%) have poor academic supervision scores in the range of <71 .

A result of the correlation analysis yielded a value of -0.307. This indicates that there is a relationship or correlation between the variable of principal's academic supervision (X_2) and pedagogical competence (Y) at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru, but it is negative or in the opposite direction.

Table 6: ANOVA table for the variable of academic supervision of pedagogical competence

Anova ^a				
Model	Sum of Squares	df	Mean Square	Sig.
1 Regression	395.263	1	395.263	.178
idual	3538.907	58	61.016	.014 ^b
Total	3934.170	59		

a. Dependent Variable: pedagogical competence

b. Predictors: (Constant), academic supervision

The outcome of the ANOVA test on the principal's academic supervision against pedagogical competence obtained a significance value of $0.014 < 0.05$. Meanwhile, the calculated $F_{\text{value}} > \text{the table } F_{\text{value}}$, namely $6.478 > 3.15$. This result means that H_0 is rejected and H_a is accepted, thus the hypothesis in the study stating that "there is an influence of the principal's academic supervision on pedagogical competence at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru" is accepted.

Table 7: Coefficient of Determination of academic supervision of pedagogical competence

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.317 ^a	.100	.085	31125

a. Predictors: (Constant), academic supervision

Next, to determine the extent of the influence of the principal's academic supervision on pedagogical competence, we use the R-Square coefficient of determination expressed as a percentage, which shows an R-Square value of 0.100. This result means that 10.00% of pedagogical competence is affected by the academic supervision of the principal. While the remaining 90% is impacted by other variables that were not examined in this study.

Table 8: Results of simple regression of the principal's academic supervision variable on pedagogical competence

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	100.636	10.465		.517	.000
Academic supervision	-.301	.118	-.317	-2.545	.014

a. Dependent Variable: pedagogical competence

The results of the regression coefficients of the principal's academic supervision on pedagogical competence obtained the regression equation model: $Y = 100.636 - 0.301X_2$, which can be interpreted that when the principal's academic supervision is valued at 0, pedagogical competence has a value of 100.636 with the assumption of a reduction in the regression coefficient of the principal's academic supervision variable by 0.301. Thus, it can be said that the quality of pedagogical competence is influenced by the quality of the principal's academic supervision. The better the principal's academic supervision, the higher the pedagogical competence. Similarly, if the academic supervision of the principal is not good, the pedagogical competence of certified teachers at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru will also decline.

The results of this study are in line with the research conducted by Istiqomah (2023), which claims that the school culture and principal supervision has a direct impact on interpersonal communication, partially at 48.5% and 42.7% respectively, and simultaneously at 62%, with the remaining 38% influenced by other factors.

According to Glickman, et al. in Santosa and Nusyirwan (2019:3), academic supervision is one of the essential functions in the overall school program. Academic supervision is a sequence of coaching activities that help teachers improve the quality of their teaching, which in turn leads to better learning outcomes for students.

The results of Winarno's (2021) research indicate that academic supervision can enhance teachers' professionalism competence in pedagogical, personal, professional, and social. The principal is able to plan the supervision program well, conduct standard supervision, and carry out supervision for follow-up according to teachers' needs, especially in improving the quality of their teaching. (Nurlaili et al., 2021).

The Influence of School Culture and Academic Supervision by the Principal on Pedagogical Competence at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru, Tegal Regency

Based on descriptive statistics, the pedagogical competence of teachers shows that there are 11 teachers (18.33%) with very good pedagogical competence scores in the range of > 82.29, while 39 teachers (65%) have good pedagogical competence in the range of 65.96 – 82.29. Additionally, there are 10 teachers (16.67%) with low pedagogical competence scores in the range of <65.96.

Table 9: *Coefficient of Determination of School Culture and Principal's Academic Supervision on Pedagogical Competence*

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.412 ^a	.170	.141	7.56937

a. Predictors: (Constant), academic supervision, school culture

b. Dependent Variable: pedagogical competence

The value of the coefficient of determination (R-Square) indicates how good the independent and dependent variables interact to generate the regression model is, at 0.170. This means that the school culture variable and the principal's academic supervision

simultaneously affect pedagogical competence by 0.170 or 17%, while the remaining 83% is influenced by other variables outside the study.

Table 10: ANOVA table for the variable of principal's academic supervision on pedagogical competence

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	668.338	2	334.169	5.832	.005 ^b
	Residual	3265.832	57	57.295		
	Total	3934.170	59			

a. Dependent Variable: pedagogical competence

b. Predictors: (Constant), academic supervision , school culture

The results of the simultaneous test in the table show an F-count of 5.832. Meanwhile, the F-table value is 2.002. This indicates that the $F_{\text{count value}} > F_{\text{table value}}$, namely $5.832 > 2.002$, and the significance value is $0.005 < 0.05$. Therefore, it can be concluded that H_0 is rejected and H_1 is accepted, meaning that the school culture of certified educator teachers (X_1) and the academic supervision of the school principal (X_2) simultaneously affect the pedagogical proficiency of the instructor at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru.

Table 11: Simple regression results of the principal's academic supervision variable on pedagogical proficiency

Coefficients ^a						
Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			

1	(Constant)	74.384	15.731	4.729	.000
	school culture	.251	.115	.270	2.183 .033
	academic supervision	-.244	.117	-.257	-2.081 .042

Dependent Variable: pedagogical competence

The regression coefficients for the school culture of certified teacher educators (X_1) and the academic supervision of the principal (X_2) yielded the regression equation $Y=74.384 + 0.251(X_1) - 0.244.(X_2)$. It can be interpreted that there is a strong positive influence between school culture and pedagogical competence, but there is a negative influence of the principal's academic supervision on pedagogical proficiency. Thus, it can be said that the quality of the pedagogical competence of teachers at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru is influenced by the school culture and the academic supervision of the principal. The better these two variables are, the more they will enhance pedagogical competence. Conversely, if both variables are not good, they will decrease pedagogical competence.

The difference in influence between school culture and the academic supervision of the principal on pedagogical proficiency at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru shows that the influence of school culture on pedagogical competence is 10.7%, while the influence of academic supervision on pedagogical competence is 10%. This result indicates that the impact of school culture is greater than the impact of the principal's academic supervision ($10.7 > 10.0$).

DISCUSSION

Based on the coefficients table, the impact of school culture on certified teacher educators' pedagogical competence is known, where the t-value $>$ t-table ($2.634 > 2.002$) for alpha 0.05, thus H_0 is rejected while H_a is accepted, indicating that school culture can influence teachers' pedagogical competence. The extent of the influence of school culture on pedagogical competence partially is 10.7%. School culture contributes positively. This means that if the school culture that is maintained or created is a good culture, then the pedagogical competence of teachers will improve.

According to Niswah (2020), Culture of the school has a positive impact on the pedagogical proficiency of elementary school educators in Demak Regency by 25.1% with a correlation value of 0.426. In agreement with Zubaidah (2015), who stated that the school culture at SMK N 1 Pabelan has the positive influence on the quality of education by 67.6%, categorized as moderate.

Based on the results of this study, the existing culture must be maintained and even improved further. If there is a new school culture that aligns with the school environment, it should be implemented together with other school members to provide a sense of safety and comfort for the school community. Bad habits such as being late to school, certified teachers being impolite or unfriendly to school residents, and violating social and religious norms need to be sanctioned to instill discipline among all school residents. The presence of communication and effective conflict management will result in the creation of harmonious relationships among all school members, the improvement of the quality management of educational units, the clarity of the school's vision and mission, and the management of human resources (educators, educational staff, and students) to achieve the school's goals together.

In the table of thitung results, the academic supervision on pedagogical competence shows $t_{hitung} < t_{tabel}$, namely $-2.545 < 2.002$, thus H_0 is rejected while H_a is accepted, which means that academic supervision can negatively affect the pedagogical competence of teachers at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru. The extent of the influence of academic supervision on teachers' pedagogical competence is 10% in partial terms. Academic supervision negatively affects teachers' pedagogical competence, meaning that for every 1% increase in academic supervision by the principal's, the pedagogical proficiency decreases by 0.301 points.

In agreement with Siska (2020), who stated that there is an influence of academic supervision on the professionalism of elementary school teachers in the Banyumanik sub-district of Semarang city by 10.2%. However, there is still the lowest perception regarding academic supervision, especially in terms of follow-up programs. According to Niswah (2020), the academic supervision of school principals has a positive effect on the pedagogical proficiency of elementary school teachers in Demak Regency by 30.1% with a correlation value of 0.315.

Based on the explanation above, it is proven that the academic supervision also affects the pedagogical competence of teachers, because through planned, measurable, and regular academic supervision activities, educators can complete their tasks in the learning process. As the supervisor, the principal is able to determine the teaching and learning process's strengths and faults. It is allowing the principal to provide feedback, reinforcement, and solutions to the issues faced by the teachers. Furthermore, the teachers can develop their professionalism, social skills, pedagogical abilities, and personal qualities.

The outcome of the test on the influence of school culture of certified teacher educators and academic supervision simultaneously on teachers' pedagogical competence showed that $F_{hitung} = 5.832 > F_{tabel} 2.002$ with a significance level of 0.05. The results prove that the school culture of certified teacher educators and the academic supervision of the principal, when conducted simultaneously, can enhance the pedagogical proficiency of teachers. The extent of the influence of the school culture of certified teacher educators and the academic supervision of the principal simultaneously on the pedagogical proficiency of teachers is 17%. It indicates that if the principal's academic supervision and the school culture for certified teacher educators are properly executed and it is carried out periodically according to good supervision principles, there will be an improvement in teacher competence at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru, Tegal Regency.

According to Nunuk (2022), the outcome of the simultaneous test between school culture and the academic supervision on teacher performance at the Hasanudin Cluster Elementary School in Kaliori District, Rembang Regency, obtained an F-value of 178.566. Meanwhile, the F-table value is 3.18. This value indicates that $F\text{-value} > F\text{-table}$ ($178.566 > 3.18$) and the sig value is $0.000 < 0.05$, thus it can be concluded that H_0 is rejected and H_a is accepted, meaning that there is an influence of school culture and the academic supervision of the principal together on teacher performance at the Hasanudin Cluster Elementary School in Kaliori District, Rembang Regency.

School culture and the academic supervision simultaneously influence the pedagogical competence of teachers at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru. The principal must recognize the value of a positive school climate and how it impacts teachers' teaching practices. Teacher pedagogical competence can be increased with a good school culture, such as always maintaining work discipline, consistently supporting the establishment of a culture of achievement, instilling religious values, upholding a culture of

honesty, fostering good cooperation among school members, adhering to rules and regulations, providing regular training for educators, teachers always educating professionally, and dedicated to giving their all, learning new things constantly, and succeeding for the sake of their pupils.

Conclusion and Recommendations

Based on the outcome of data analysis and the discussion of the impact of school culture, certified educator teachers, and the academic supervision of school principals on the competence of pedagogical teachers at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru, Tegal Regency, several conclusions can be drawn. Among these are that the school culture of certified educator teachers partially influences the pedagogical competence of teachers at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru by 10.7%, and the academic supervision also affects pedagogical competence by 10%. The school culture of certified educator teachers and the academic supervision of the school principal concurrently influence the pedagogical proficiency of teachers at SMK Bhakti Praja Slawi and SMK Bhakti Praja Dukuhwaru by 17%.

Based on the research results, discussion, and conclusions drawn, the researchers recommend: The existing good school culture needs to be maintained and preserved, and improved if necessary. If there are new cultures that align with the school environment, collaboration and development should be made to create a new culture in the school that enhances the school's quality. The principal should ensure that the preparation, execution, and assessment of academic supervision are conducted objectively and systematically measured so that the pedagogical competence of teachers can improve; It is hoped that this research can serve as a reference and guideline for conducting research within the scope of educational administration by examining other variables related to teachers' pedagogical competence.

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REFERENCES

- Ahmad Susanto. (2018). *Management of Teacher Performance Improvement: Concepts, Strategies, and Implementation*. Jakarta : Kencana
- Albustani, M.A (2023). *The Influence of School Principal's Academic Supervision, Teacher Training Experience, and Teacher Work Experience on Teacher Pedagogical Competence at MTsN 2 Ponorogo*. Postgraduate Program, State Islamic Institute of Ponorogo
- Annisa Nur Fathonah. (2019). *The Influence of School Culture on the Discipline Character of Students in PAI and Character Education Learning in Grade VII at SMP Negeri 2 Lendah Kulon Progo*. Sunan Kalijaga State Islamic University. Yogyakarta
- Daryanto & Hery Tarno. (2015). *Management of School Culture and Climate*. Yogyakarta: Gava Media.
- Dirjen Pembinaan SMA. (2017). *Academic Supervision Guide. Director General of Primary and Secondary Education, Ministry of Education and Culture*. Jakarta.
- Fadhilatunisa.D (2023). *Methodology of Quantitative, Qualitative, and Mixed Research*. Publisher: Media Sains Indonesia. Bandung
- Ghozali, Imam. (2016). *Multivariate Analysis Application with SPSS Program*. Semarang: Diponegoro University Publishing Agency.
- Istiqomah, D N. (2019). *The Influence of School Culture, Principal Supervision, and Interpersonal Communication on Teacher Social Behavior*. Postgraduate Program in Educational Management, Semarang State University, Semarang
- Kemendikbud Dirjen GTK, (2019). *Enrichment and Remedial Materials, General Pedagogy*. Purba, S. (2021). *Pedagogical Foundations: Theory and Study*. Medan: Yayasan Kita Menulis.
- Kemdikbud GTK (2021). *Pedagogical Independent Learning Module*. Jakarta
- Mulyasa, E. (2013). *Teacher competency and certification standards*. Bandung: Remaja Rosdakarya.
- Niswah W.(2020). Analysis of School Principal Academic Supervision and School Culture on the Pedagogical Competence of Elementary School Teachers in Demak Regency. *Indonesian Journal of Women and Children*. Volume 2 Number 1, 43-57. ISSN 2686-2891. Master of Elementary Education, Universitas Muria Kudus
- Nunuk, K., Ahmad. H.M., Suad (2022). The Influence of School Culture and Principal's Academic Supervision on the Improvement of Teacher Performance at the Hasanudin Cluster Elementary School, Kaliore District, Rembang Regency. *Scientific Journal of Educational Pathways*. 8 (18), 269-282. DOI: <https://doi.org/10.5281/zenodo.7134358>
- Nurlaili, N., Cahaya, W., & Raolah, R. (2021). Improvement of principals' supervision competence through accompaniment in principal working groups. *Cypriot Journal of Educational Sciences*, 16(4), 1704–1720

- Nursidah, Muh Yunus, Elpisah. (2022). The Influence of Principal's Academic Supervision and School Culture on Teacher Quality. *Journal of Economic Education (JUPE)* Vol. 10 No. 1. DOI <https://doi.org/10.26740/jupe.v10n1.p3844>
- Government Regulation of the Republic of Indonesia Number 74 of (2008) concerning Teachers Chapter II Article 2
- Regulation of the Minister of National Education Number 18 of 2007 concerning Certification for Teachers in Position.
- Permendikbud No. 22 of 2016 on Standards for Basic and Secondary Education Processes
- Pramana M.E , Syunu Trihantoyo. (2021). Character Formation of Students Through School Culture at the Elementary School Level. *Journal of Educational Management Inspiration*. Volume 09 Number 03 Year 2021, 764-774. Faculty of Education Management, State University of Surabaya.
- Prihatin,Y.(2019).”*The Practice of English Language Teaching In Indonesia*”, *Prosiding 1st National Seminar of PBI (English Language Education)*. ISBN:978-602-6779-26. Universitas Pancasakti Tegal.
- Rachmawati, D,W. dkk (2021). *Theory and Concepts of Pedagogy*. Cirebon: Insania Publisher.
- Role, M. T. B., & Tampubolon, H. (2018). The Relationship Between School Culture and Teacher Personality Competence with Student Character at the Saint James Foundation, Kelapa Gading, North Jakarta. *Journal of Educational Management*, 5(2), 162-192. Retrieved from <http://ejournal.uki.ac.id/index.php/jmp/article/view/649> Law of the Republic of Indonesia No. 14 of 2005 on Teachers and Lecturers
- Utami,G.S., & Negara, I.G.A.O. (2021). The Contribution of School Culture and Work Motivation to Teacher Performance. *Journal of Pedagogy and Learning*. Vol. 4 No. 1, Year 2021, pp. 168-178.
<https://doi.org/10.23887/jp2.v4i1.32218>.
- Utari, et al. (2020). School Culture at State Vocational High School (SMK) Negeri 2 Padang. *Journal Educational Administration And Leadership*. Volume 1 Number 2 year 2020, pp 19-24. DOI: <https://doi.org/10.24036/jeal.v1i2>
- Zulianto, Achmad Buchori, Bagus Ardi Saputra. (2023). The Influence of Academic Supervision and School Culture on the Performance of Elementary School Teachers in Pecalongan District, Batang Regency, *Journal of Educational Research Media* vol.17, No.2, December 2023, pp:242-255. DOI: <https://doi.org/10.26877/mpp.v17i2.15178>