

# The Influence of Transformational Leadership of the Principal on the Pedagogic Competence of Teachers in Public Vocational High Schools in Padang City

Beti Adriyani Dona<sup>1\*</sup>, Tia Ayu Ningrum<sup>2</sup>, Rifma<sup>3</sup>, Singgih Ginanjar<sup>4</sup>

<sup>1234</sup> Department of Educational Administration, Padang State University, Padang, Indonesia

## ARTICLE INFO

### Article history:

Received April 27, 2026

Revised May 08, 2026

Accepted May 10, 2026

Available online June 30, 2026

### Keywords:

Transformational Leadership, Principal, Pedagogical Competence, Teachers



This is an open access article under the [CC BY](https://creativecommons.org/licenses/by/4.0/) license.

Copyright © 2022 by Author. Published by Laboratory of Educational Administration Departemen Universitas Negeri Padang

## ABSTRACT

One of the issues in teachers' pedagogical competence is that the learning process still uses an outdated paradigm, so transformational leadership of the school principal is needed to improve it. This research aims to analyze teachers' pedagogical competence, examine the transformational leadership of the school principal, and determine the effect of transformational leadership on teachers' pedagogical competence. The method used is a quantitative approach with survey techniques. This study adopts a positivist paradigm with a population of 635 civil servant teachers (ASN) and a sample determined through stratified proportional random sampling technique. Data were collected using Likert scale questionnaires and analyzed with descriptive and inferential statistics, including validity tests, reliability tests, normality tests, t-tests, and the coefficient of determination ( $R^2$ ). The results indicate that teachers' pedagogical competence is in the good category, as is the transformational leadership of the school principal. Hypothesis testing shows a significant influence (sig.  $0.000 < 0.05$ ) with a coefficient of determination ( $R^2$ ) of 0.278, meaning that 27.8% of teachers' pedagogical competence is influenced by the transformational leadership of the school principal. The novelty of this research lies in strengthening empirical evidence regarding the influence of transformational leadership of school principals on teachers' pedagogical competence within the educational context, particularly through a quantitative approach that provides measurable insights into the relationship between these two variables.

## Corresponding Author:

Beti Adriyani Dona

Email: [betiadriyanidona0606@gmail.com](mailto:betiadriyanidona0606@gmail.com)

## 1. INTRODUCTION

Teachers play a crucial role in the learning process, not only as transmitters of knowledge but also as facilitators, motivators, and guides in developing students' attitudes, skills, and values. The role of teachers includes educating, teaching, guiding, and assessing students, as well as acting as communicators and sources of inspiration (Andini et al., 2024). In carrying out these roles, teachers are required to possess competencies that support the achievement of educational goals. Based on the Regulation of the Minister of National Education of the Republic of Indonesia Number 14 of 2005, teacher competencies consist of pedagogical, personality, social, and professional competencies, which are interconnected and collectively determine the quality of teaching (Marshavira Pricilia et al., 2024).

Among these competencies, pedagogical competence is a fundamental aspect because it is directly related to the teacher's ability to manage the learning process. Pedagogical

competence includes understanding student characteristics, designing and implementing learning, evaluating learning outcomes, and developing students' potential (Akbar, 2021). This is in line with the National Education Standards, which emphasize that pedagogical competence reflects the teacher's ability to manage student learning effectively. Strong pedagogical competence enables teachers to select appropriate learning strategies and create meaningful learning experiences, thereby optimizing students' potential (Habibullah, 2012).

However, empirical evidence indicates that teachers' pedagogical competence is not yet optimal. Based on initial observations and interviews conducted at a State Vocational High School in Padang City in October 2025, several issues were identified, including the learning process that still uses an outdated paradigm, teachers who are only focused on textbooks and lack integration with students, and teachers who mainly concentrate on teaching activities and student assessment. Pratama (2021) states that many teachers still apply conventional teaching approaches, such as one-way lectures, where students tend to become passive recipients of information. Additionally, teachers often rely heavily on textbooks and show limited interaction with students, resulting in monotonous learning processes (Agustina, 2029). Furthermore, in preparing lesson plans such as syllabi and lesson plans, some teachers tend to adopt material from external sources without adequate adaptation to students' needs and the school's context, which reduces the effectiveness of learning.

One of the factors influencing teachers' pedagogical competence is the leadership of the school principal. The principal plays a strategic role in improving the quality of education and fostering teacher development. The success of educational institutions is strongly influenced by the quality of school leadership (Angelina, 2021). Effective leadership can encourage teachers to work optimally, create a conducive learning environment, and improve professional competence. In this context, the role of the principal as an educational leader has been shown to influence teachers' pedagogical competence (Karacabey, 2022).

Transformational leadership, as proposed by Burns (1978) and further developed by Bass (1985), is considered relevant in enhancing teachers' competence. This leadership style emphasizes idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, which can foster innovation, increase motivation, and support teachers' professional growth. Through transformational leadership, principals are expected to create a positive school climate that supports the improvement of pedagogical competence (Kumala, 2023).

Nevertheless, field findings indicate that the implementation of transformational leadership is not yet optimal. Some principals have not fully demonstrated behaviors that inspire trust and respect, nor have they provided sufficient motivation and intellectual stimulation for teachers. In addition, limited personal attention to teachers' professional needs may hinder efforts to improve pedagogical competence (Rosyida, et al, 2022).

Based on these conditions, this study aims to examine the influence of principals' transformational leadership on teachers' pedagogical competence. The findings of this study are expected to provide empirical evidence and contribute to improving teacher competence and the overall quality of education.

## **2. METHOD, DATA, ANALYSIS**

This study used quantitative methods to assess the influence of the principal's transformational leadership on teacher pedagogical competence at a public vocational high school in Padang City. The study population was 635 teachers, and the sample size was 253. Stratified proportional random sampling was used to draw the sample. The Slovin formula was used to determine the sample size. The data collection instrument was a questionnaire constructed using a Likert scale. Like the Likert scale, Sugiyono (2019) states that the Likert scale is used to measure the attitudes, opinions, and perceptions of individuals or groups regarding social phenomena. There are five response options: Always (SL), Often (SR), Sometimes (KD), Rarely (JR), and Never (TP).

The research phase began with the development of a questionnaire framework, which required guidance from the supervising lecturer in formulating the questions for each questionnaire. A pilot test of the questionnaire was conducted with 20 teachers outside the research sample. The results of the pilot test were then analyzed using SPSS (Statistical Package for the Social Sciences) version 26 to determine its validity and reliability. After testing and analysis, questionnaires were distributed to respondents, and the collected data were analyzed by calculating the average of respondents' answers using the mean formula. The research results were then processed to

determine the level of achievement using research classifications and categories. Afterward, classical assumption tests were conducted using normality and linearity tests, followed by simple linear regression, and finally, hypothesis testing using T and R<sup>2</sup>.

### 3. RESULT AND DISCUSSION

#### Result

The results of the study on the influence of the principal's transformational leadership on the pedagogical competence of teachers at State Vocational High Schools in Padang City have two variables, namely the principal's transformational leadership variable (X) and the teacher's pedagogical competence variable (Y).

#### Principal's Transformational Leadership

Viewed from four aspects: 1) idealized influence, 2) inspirational motivation, 3) intellectual stimulation, and 4) individual consideration. The following research was conducted to determine the influence of principal transformational leadership on teacher pedagogical competence at Public Vocational High Schools in Padang City, as described in the following table:

Table 1. Principal Transformational Leadership Indicator Achievement Level

No	Indicator	Average	%TCR	Classification
1	Idealized Influence	4,18	90,91	Very Good
2	Inspirational Motivation	4,09	84,21	Good
3	Intellectual Stimulation	4,21	95,24	Very Good
4	Individual Consideration	4,04	80,00	Good
<b>Average Score</b>		<b>4,13</b>	<b>87,59%</b>	<b>Good</b>

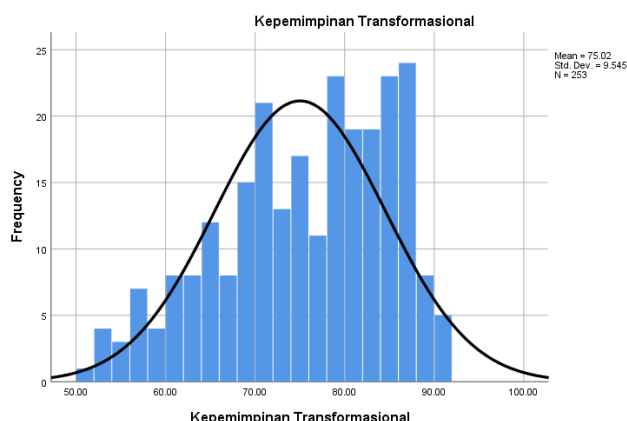


Figure 1. Transformational Leadership Histogram

The table above shows that the highest average score is found in the Individualized Consideration indicator, which is 3.68 with a percentage of 92%, while the lowest average score is found in the Idealized Influence indicator, which is 3.46 with a percentage of 86%. This means that the transformational leadership of the principal at the Public Vocational High School of South Solok Regency is already in the good category. Table 1 shows that the highest average score was found in the intellectual stimulation indicator with an average score of 4.21 with a percentage of 95%. Meanwhile, the lowest average was found in the individual consideration indicator with an average score of 4.04 with a percentage of 80%. In general, the average score of transformational leadership of principals at Padang City State Vocational High Schools was 4.13 with a percentage of 87%. This means that the transformational leadership of principals at Padang City State Vocational High Schools is already in the good category.

#### Teacher Pedagogical Competence

Viewed from seven aspects: 1) Mastering Student Characteristics, 2) Mastering Learning Theory and Principles, 3) Developing Curriculum, 4) Utilizing Information and Communication

Technology, 5) Facilitating the Development of Student Potential, 6) Communicating Effectively with Students, 7) Conducting Assessments and Evaluations. The following table describes the results of research conducted to determine the influence of principals' transformational leadership on teacher pedagogical competence at Public Vocational High Schools in Padang City:

Table 2. Teacher Pedagogical Competency Indicator Achievement Level

No	Indicator	Average	%TCR	Classification
1	Mastering Student Characteristics	4,20	95,24%	Very Good
2	Mastering Learning Theory and Principles	4,14	90,48%	Very Good
3	Developing Curriculum	4,16	90,91%	Very Good
4	Utilizing Information and Communication Technology	3,91	72,73%	Fair
5	Facilitating the Development of Student Potential	4,02	78,26%	Fair
6	Communicating Effectively with Students	4,12	80,95%	Good
7	Conducting Assessments and Evaluations	4,16	85,71%	Good
<b>Average Score</b>		<b>4,14</b>	<b>84,90%</b>	<b>Good</b>

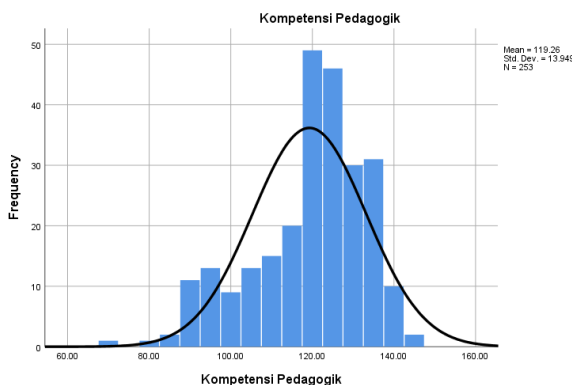


Figure 2. Histogram of Teacher Learning Innovation

Table 2 shows that the highest average score was found for the indicator of mastery of student characteristics, with an average score of 4.20, representing a percentage of 95.24%. Meanwhile, the lowest average score was found for the indicator of utilization of information and communication technology, with an average score of 3.91, representing a percentage of 72.73%. Overall, the average score for teacher pedagogical competence at Padang City State Vocational High Schools was 4.14, representing a percentage of 84.90%. This indicates that teacher pedagogical competence at Padang City State Vocational High Schools is in the good category.

**Instrument Feasibility Test**

The requirements and hypothesis testing for this study are as follows:

1. Prerequisite Test

a. Normality Test Results

The normality test aims to determine whether the data in the study is normally distributed. If the distribution is normal, then alternative non-parametric tests can be used. The normality test in this study was processed using SPSS version 26. To obtain an overview of the normality test for innovative teacher behavior and digital leadership of school principals, see the following table:

Table 3. Normality Test

Transformational Leadership of School Principals and Teachers' Pedagogical Competence	
Asymp.Sig. (2-Tailed)	Sig
0.200	0.05

If the significance value is > 0.05, then it is declared normally distributed. If the significance value is < 0.05, then the data is declared not normally distributed. The results of the normality test obtained a significance value of 0.200, meaning  $0.200 > 0.05$ , the normality test conducted indicates that the data obtained is normally distributed.

b. Linearity Test Results

The linearity test aims to determine whether the principal's transformational leadership variable tends to form a linear relationship with the teacher's pedagogical competence variable. A significance value greater than 0.05 indicates a linear regression line. However, a significance value less than 0.05 indicates a non-linear regression line. A value greater than 0.05 indicates a non-linear regression line. To determine whether the regression is linear, see the following table:

Table 4. Linearity Test

Transformational Leadership of School Principals and Teachers' Pedagogical Competence	
F hitung	Sig
1,274	0.194

The linearity test showed a significance value (Sig). The deviation from linearity was 1.274, indicating a linear effect between variable X (principal digital leadership) and variable Y (Teacher Pedagogic Competence). The deviation from linearity ( $1.274 > 0.05$ ) indicates a linear effect.

**Analysis of the Effect of Variable X on Variable Y**

1. Hypothesis Testing

a. Simple Linear Regression Test Results

A simple linear regression test is used to test or predict the influence of one variable or independent variable (the principal's transformational leadership) on the dependent variable (teacher pedagogical competence). The results of the simple linear regression test can be seen in the following table:

Table 5. Simple Linear Regression Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	61.471	5.928		10.370	.000
Kepemimpinan Transformasional	.770	.078	.527	9.827	.000

Based on Table 5, the results of the data testing using hypothesis testing data analysis indicate that the calculated t-test result is greater than the table t-test, namely  $9.827 > 1.651$  and with a significance level of  $0.000 < 0.05$ . This indicates that some of the principal's transformational leadership variables have a positive and significant influence on teacher pedagogical competence. Based on the simple regression analysis in the constant value column of Table 3, the value is 61.471, while the regression direction coefficient is 0.770. Thus, the equation is  $Y = 61.647 + 0.770X$ . Based on this equation, the constant value of 61.471 indicates that if the principal's transformational leadership value (X) is zero, then the teacher's pedagogical competence (Y) has a value of 61.471. The regression coefficient of 0.770 indicates that for every unit increase in the principal's

transformational leadership (X), there is an increase in teacher pedagogical competence (Y) of 0.770X. A positive regression coefficient value indicates a positive influence between the principal's transformational leadership and teacher pedagogical competence. This means that the higher the principal's transformational leadership implemented, the more the teacher's pedagogical competence increases. This positive coefficient indicates that increasing the principal's transformational leadership will have a direct impact on increasing teacher pedagogical competence.

b. T-Test Results

To determine the significance of the independent variable (principal transformational leadership) partially or individually on the dependent variable (teacher pedagogical competence), a significance (t) test was conducted. The decision in the t-test is as follows: If the sig. <0.05 or the calculated t value > the table t value, then there is an effect of variable X on variable Y. Furthermore, if the sig. >0.05 or the calculated t value < the table t value, then there is no effect of variable X on variable Y. The t-table value with a confidence level of 0.05 (N = 253) in the t-table distribution is 1.651. To see the t-value again, see the table below:

Table 6. T-Test Results

Transformational Leadership of School Principals and Teachers' Pedagogical Competence		
thitung	Ttabel	Sig.
9,827	1,651	0,000

Based on the calculation results, the calculated t-value is 9.827 > t-table = 1.651, and the significance value is 0.000 < 0.05. Therefore, it can be concluded that the principal's transformational leadership variable (X) has a positive and significant influence on the teacher's pedagogical competence variable (Y) at Padang City State Vocational High Schools.

c. Coefficient of Determination Test (R2)

The coefficient of determination (R2) test was used to determine the extent to which the independent variable (the principal's transformational leadership) explains the dependent variable (teacher pedagogical competence). If the coefficient of determination is close to zero, the relationship between the two variables is considered weak. Conversely, if the coefficient is close to one, the relationship between the two is considered strong. The results of the coefficient of determination test can be seen in the following table:

Table 7. R2 Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.527 a	.278	.275	11.8772 2

Based on the table above, the percentage of influence of the independent variable (the principal's transformational leadership) on the dependent variable (teacher competence), also known as the coefficient of determination (R-squared), is 0.278 or 27.8%. This means that the principal's digital leadership is able to influence teachers' innovative behavior by 27.8%, with the remaining 72.2% influenced by other variables outside this study.

**Discussion**

**Principal's Transformational Leadership**

The results of the study above describe that the transformational leadership of principals in State Vocational High Schools throughout Padang City is in the good category with an average

score of 87.59%. From several indicators of the principal's transformational leadership, it can be seen that the highest average score indicator is in the Ideal Influence indicator in the very good category, namely 4.18 with a percentage of 90.91%, while the lowest average score is in the individual consideration indicator, namely 4.04 with a percentage of 80.00%.

The highest indicator, idealized influence, achieved an average score of 4.18, representing 90.91%, which is considered very good. This achievement demonstrates that the principal has been able to serve as a role model for teachers and education personnel through their attitudes, behavior, and demonstrated integrity. The principal is able to foster trust, respect, and loyalty through consistency between words and actions and a commitment to organizational values.

This aligns with the opinion of Bernard M. Bass and Bruce J. Avolio, who stated that idealized influence is a leader's ability to serve as a role model respected and trusted by their members through ethical behavior and integrity. Furthermore, Gary Yukl (2020) also emphasized that an effective leader is one who builds trust through consistency and exemplary behavior.

Furthermore, the lowest indicator, individualized consideration, achieved an average score of 4.04, representing 80.00%, which is considered good. This indicates that the principal is quite capable of providing personal attention to teachers, but is still not optimal in understanding individual needs in depth and sustainably.

According to Bernard M. Bass, individualized consideration is a leader's ability to provide personal attention, understand individual needs, and act as a mentor to their staff. Similarly, Viviane M. J. Robinson (2022) stated that individual attention from leaders has a significant influence on increasing teacher motivation, job satisfaction, and performance.

Given that the achievement of this indicator is still in the good category, several efforts are needed to improve it, including: (1) increasing the intensity of interpersonal communication between the principal and teachers, (2) providing ongoing mentoring and coaching, (3) developing professional development programs based on individual teacher needs, and (4) providing personal rewards and recognition for teacher performance and achievements.

Thus, it can be concluded that the principal's transformational leadership is already in the good category, with advantages in the aspect of ideal influence. However, improvements in the aspect of individual consideration are still needed so that the leadership implemented can more optimally support teacher performance and development.

### **Teacher Pedagogical Competence**

The results of the study above indicate that the pedagogical competence of teachers in public vocational schools (SMK Negeri) throughout Padang City is in the good category, with an average score of 84.90%. Several indicators of teacher pedagogical competence show that the highest average score is for mastering student characteristics, which is in the very good category, at 4.20 (95.24%). While the lowest average score is for utilizing information and communication technology, which is in the fair category, at 3.91 (72.73%).

The highest indicator, mastering student characteristics, achieved an average score of 4.20 (95.24%), which is in the very good category. This achievement demonstrates that teachers have a deep understanding of student characteristics, including abilities, interests, backgrounds, and learning styles. This understanding is crucial because it forms the basis for designing learning that is tailored to student needs, resulting in a more effective and meaningful learning process. This aligns with Saputra's (2021) opinion, which states that effective learning begins with teachers understanding students' characteristics and needs, enabling them to adapt learning strategies appropriately. Furthermore, Rahmawati (2022) also emphasized that understanding students is a crucial factor influencing learning success and student learning outcomes.

Furthermore, the lowest indicator, the utilization of information and communication technology, achieved an average score of 3.91, with a percentage of 72.73%, which is in the fairly good category. This indicates that teachers have begun utilizing technology in learning, but their use is not yet optimal, particularly in integrating technology pedagogically to support a more innovative and interactive learning process.

The use of technology in learning will be effective if teachers are able to integrate technology with appropriate learning strategies, rather than simply using it as a tool (Darmawan, 2021). Similarly, Yaumi (2019) emphasized that effective technology integration requires a balance between technological, pedagogical, and content knowledge (TPACK) so that technology truly supports meaningful learning.

Given that the achievement of this indicator is still in the fairly good category, several efforts are needed to improve it, including: (1) improving teacher competency through training and workshops related to the use of digital learning technology, (2) encouraging the use of interactive learning platforms such as Learning Management Systems (LMS), (3) developing innovative digital-based learning media, (4) improving teacher digital literacy to be more adaptive to technological developments, and (5) building a learning community among teachers to share good practices in technology utilization.

Thus, it can be concluded that teacher pedagogical competency is good, with an advantage in the ability to understand student characteristics. However, there is still a need for improvement, especially in the aspect of utilizing information and communication technology so that learning can be more optimal and in line with the demands of the digital era.

### **The Influence of the Principal's Transformational Leadership on Teachers' Pedagogical Competence**

The results of data analysis and hypothesis testing revealed that the t-test obtained a calculated t greater than the t-table, with a value of  $9.827 > 1.651$ , with a significance level of  $0.000 < 0.05$ . This indicates that the principal's transformational leadership partially has a positive and significant effect on teacher pedagogical competence. This finding is supported by recent research showing that the principal's transformational leadership significantly influences teacher pedagogical competence. A study by Safitri et al. (2025) found that transformational leadership, characterized by idealized influence, inspirational motivation, intellectual stimulation, and individualized attention, can encourage professional development and continuously improve the quality of teacher learning. Furthermore, research by Supartiningsih et al. (2024) also demonstrated that the principal's transformational leadership positively influences teacher pedagogical competence, particularly in the ability to plan, implement, and evaluate learning.

These results are supported by the coefficient of determination ( $R^2$ ) test, with an R-squared value of 0.278, indicating that 27.8% of the change in teacher pedagogical competence can be explained by the principal's transformational leadership variable, while the remaining 72.2% is influenced by other factors outside the study, such as educational background and teaching experience, work motivation, and the work environment. This aligns with research by Rizal and Rahayu (2024), which shows that principal leadership that involves and collaborates with teachers can improve teacher pedagogical competence. This finding is further supported by recent research, which states that a principal's transformational leadership has a positive effect on teacher performance and professionalism, including in the planning, implementation, and evaluation of learning. Furthermore, other research confirms that transformational leadership can improve teacher motivation, innovation, and the quality of learning through ongoing empowerment and support (Popham, 2020)

To see the simple regression equation, the analysis uses the formula for the values of a and b (details can be seen in the appendix). The data analysis results show the equation  $Y = 61.471 + 0.770X$ , which states that if the principal's transformational leadership is not implemented ( $X=0$ ), the teacher's pedagogical competence score is estimated at 61.471, indicating the influence of other factors. The regression coefficient of 0.770 indicates that every 1% increase in the principal's transformational leadership score will increase the teacher's pedagogical competence score by 0.770. Therefore, it can be concluded that the direction of the influence of variable X on variable Y is positive and significantly related.

Transformational leadership is a crucial aspect of educational management that significantly influences the improvement of teacher competence in schools. According to Bernard M. Bass and Bruce J. Avolio, transformational leadership is a leader's ability to inspire, motivate, and develop the potential of subordinates through idealized influence, inspirational motivation, intellectual stimulation, and individual attention (Pianda, 2018).

In the context of education, the principal as a leader plays a strategic role in promoting the improvement of teachers' pedagogical competence through coaching, providing motivation, and ongoing support. This role is not limited to administrative functions but also involves creating a conducive school climate for the professional development of teachers (Sugianto, 2024). Transformational leadership of the principal is considered an effective approach because it can inspire, empower, and motivate teachers to continually innovate in the learning process. Transformational leadership of the principal plays a vital role in helping teachers develop their ability

to plan, implement, and evaluate learning effectively through ideal influence, inspirational motivation, intellectual stimulation, and individualized consideration (Nuryana et al., 2025). Through this approach, teachers are encouraged to enhance their creativity, self-reflection, and commitment to improving the quality of learning.

Several studies indicate that the better the implementation of transformational leadership by the school principal, the higher the teachers' pedagogical competence. Transformational leadership can enhance teachers' motivation, commitment, and performance through empowerment and ongoing support, which directly impacts the improvement of pedagogical skills (Sugianto, 2024). This further implies that the quality of the learning process becomes more effective, innovative, and student-centered (Hallinger, 2011). Thus, transformational leadership not only contributes to enhancing teachers' performance and competence but also plays a crucial role in creating a better overall quality of education.

This aligns with research by Hafitriani (2021), which states that a principal's transformational leadership style influences teachers' pedagogical competence. Furthermore, Wirawan (2018) also explains that transformational leadership can improve teachers' pedagogical competence through several mechanisms. First, the principal is able to motivate teachers by inspiring them, providing clear direction, and providing support in carrying out their duties. Second, transformational leadership encourages teachers to explore new methods in the learning process and seize opportunities to improve their skills. Third, a principal who has a clear vision and mission and is able to communicate them effectively can help teachers understand the educational goals they wish to achieve. Fourth, by creating a professional work environment, the principal can encourage teachers to achieve greater achievements, innovate, and improve the quality of classroom learning (Popham, 2020).

#### 4. CONCLUSION

This study shows that the pedagogical competence of teachers at State Vocational High Schools in Padang City is categorized as good, and the transformational leadership of the school principal is also in the good category. The analysis results prove that transformational leadership of the principal has a significant influence on teachers' pedagogical competence, with a contribution of 27.8%. This confirms that the more effective the implementation of transformational leadership by the principal, the more the teachers' pedagogical competence in carrying out the learning process increases.

The findings of this study imply that the application of transformational leadership by school principals can be an effective strategy to improve teachers' pedagogical competence. Through providing motivation, inspiration, and attention to individual teachers' needs, principals are able to encourage improvements in teachers' ability to plan, implement, and evaluate learning. Therefore, policy support from relevant parties is necessary to strengthen transformational leadership practices in schools, including through coaching programs and professional development for principals. Additionally, schools are encouraged to create a conducive and collaborative work environment so that teachers can develop their pedagogical competencies optimally. Practically, principals should consistently provide clear directions, constructive feedback, and opportunities for teachers to innovate in learning. Furthermore, periodic evaluation of leadership practices and teacher performance should be conducted to ensure continuous improvement of pedagogical competence, which can lead to higher-quality, student-centered learning.

This research has limitations, including its scope, which only covers State Vocational High Schools in Padang City, and the variables studied, which are limited to transformational leadership of the principal and teachers' pedagogical competence. Additionally, the data used are based on respondents' perceptions through questionnaires, which may contain subjectivity and do not fully reflect objective conditions in the field.

#### 5. REFERENCES

- Akbar, A. (2021). *Pentingnya Kompetensi Pedagogik Guru*. *JPG: Jurnal Pendidikan Guru*, 2(1), 23. <https://doi.org/10.32832/jpg.v2i1.4099>
- Andini, M., Ramdhani, S., Suriansyah, A., & Cinantya, C. (2024). *Peran Guru dalam Menciptakan Proses Belajar yang Menyenangkan*. *MARAS: Jurnal Penelitian Multidisiplin*, 2(4), 2298-2305.

- Agustina, M. ., Wigati, I. ., & Karolina, A. . (2025). *Kepemimpinan Transformasional Kepala Sekolah dalam Membangun Keteladanan Guru di Era Disrupsi*. *JlIP - Jurnal Ilmiah Ilmu Pendidikan*, 8(12), 13754-13759. <https://doi.org/10.54371/jlIP.v8i12.10039>.
- Angelina, J. M. (2021). *Kepemimpinan Transformasional Kepala Sekolah dalam Upaya Meningkatkan Kinerja Guru*. *Jurnal Inspirasi Manajemen Pendidikan*, 1, 24-36.
- Darmawan, D. (2021). *Teknologi Pembelajaran: Teori dan Aplikasi*. Bandung: PT Remaja Rosdakarya.
- Habibullah, A. (2012). *Kompetensi Pedagogik Guru*. *EDUKASI: Jurnal Penelitian Pendidikan Agama dan Keagamaan*, 1(02), 16–19. <https://doi.org/10.32729/edukasi.v1i0i3.169>
- Hafitriani, S. 2021. *Pengaruh Kepemimpinan Transformasional Kepala Sekolah dan Motivasi Berprestasi Terhadap Kompetensi Pedagogik Guru Serta Implikasinya Terhadap Kinerja Guru*. *Indonesia Journal of Digital Business* 1(1)
- Hallinger, P. (2011). *Leadership for Learning: Lessons from 40 Years of Empirical Research*. *Journal of Educational Administration*, 49(2), 125–142.
- Karacabey, MF, Bellibaş, M. ., & Adams, D. (2022). *Pemimpin Pendidikan Kepala Sekolah dan Pembelajaran Profesional Guru di Sekolah-Sekolah Turki: Meneliti Efek Mediasi dari Kemanjuran Guru Kolektif dan Kepercayaan Guru*. *Studi Pendidikan*, 48(2), 253-272.
- Kumala, D. Y. & P. (2023). *Gaya Kepemimpinan Transformasional untuk Pengembangan Pendidikan Karakter*. *Jurnal Sosial Teknologi*, 3(11), 905–910. <https://doi.org/10.59188/jurnalsostech.v3i11.980>
- Nuryana, M. L., & Nugraha, M. S. (2025). *Peran Kepemimpinan Transformasional dalam Meningkatkan Kualitas Pendidikan di Madrasah*. *Jurnal Tahsinia*, 6(1), 150–167. <https://jurnal.rakeyansantang.ac.id/index.php/thS/article/view/588>
- Rahmawati. (2022). *Analisis Objektivitas Penilaian Guru dalam Proses Pembelajaran*. *Jurnal Pendidikan*.
- Rahayu, S., Taufiqulloh, T., & B, H. (2024). *Pengaruh Kepemimpinan Transformasional Kepala Sekolah dan Motivasi Kerja terhadap Perilaku Inovatif Guru SMA*. *Journal of Education Research*, 5(3), 3827–3839. <https://doi.org/10.37985/jer.v5i3.1477>
- Pianda, D. (2018). *Kinerja Guru: Kompetensi Guru, Motivasi Kerja dan Kepemimpinan Kepala Sekolah*. Sukabumi: CV Jejak (Jejak Publisher).
- Popham, W. J. (2020). *Classroom Assessment: What Teachers Need to Know*. Boston: Pearson Education.
- Pratama. (2021). *Peningkatan Keterampilan Komunikasi Guru dalam Proses Pembelajaran*. *Jurnal Pendidikan*.
- Pricilia, M., Febrianti, F., Ikhsan, F. F., & Putri, M. I. (2024). *Pengaruh Kompetensi Pedagogik Guru dalam Meningkatkan Mutu Pembelajaran Siswa*. *Dewantara: Jurnal Pendidikan Sosial Humaniora*, 3(1), 56-62.
- Robbins, S. P., & Judge, T. A. (2019). *Organizational Behavior (18th ed.)*. England: Pearson Education Limited.
- Rosyida, N., Mulyadi. (2022). *Kepemimpinan Transformasional Kepala PAUD untuk Meningkatkan Mutu Pendidik*. *Jurnal Pendidikan Anak Usia Dini* (2022) 6(4) 404-414
- Safitri, A., Triantoro, R. P., Mawardi, M. F., & Cinantya, C. (2025). *Tinjauan Literatur Strategi Kepemimpinan Transformasional Kepala Sekolah dalam Meningkatkan Kompetensi Guru*. *Jurnal Ilmiah Pendidik Indonesia*, 4(1), 15-26.
- Saputra. (2021). *Implementasi Penilaian Autentik dalam Pembelajaran di Sekolah*. *Jurnal Pendidikan*.
- Sugianto, E. (2024). *Pengaruh Kepemimpinan Transformasional Kepala Sekolah terhadap Kinerja Guru*. *Tsaqofah*, 4(5), 3415–3421. <https://doi.org/10.58578/tsaqofah.v4i5.3291>
- Supartiningsih, S., Abdullah, G., Nurkolis N. (2024). *Pengaruh Kepemimpinan Transformasional dan Pemanfaatan PMM terhadap Kompetensi Pedagogik Guru SMA*. *Jurnal Inovasi Pembelajaran di Sekolah* (2024) 5(1) 141-150.
- Yaumi, Muhammad. 2016. *Terminologi Teknologi Pembelajaran: Suatu Tinjauan Historis*. " *Inspiratif Pendidikan* 5, no. 1.1. <https://doi.org/10.24252/ip.v5i1.3471>.
- Yukl, Gary. (2020) : *Kepemimpinan dalam Orgnasasi (edisi Ketujuh)*. (ati Cahayani, Trans). Jakarta. PT. Indeks
- Wirawan, W. (2018). *Evaluasi Kinerja Sumber Daya Manusia*. Salemba Empat.