



The Influence of Principal's Transformational Leadership and Work Motivation on Teacher Innovation at State Elementary Schools

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ABSTRAK

Inovasi guru merupakan kemampuan seorang guru untuk berkreasi dalam mengelola proses pembelajaran dengan kompetensi yang dimilikinya. Berdasarkan prasurvei di lapangan, tergambar bahwa inovasi guru SD negeri masih rendah. Penelitian ini bertujuan untuk menganalisis pengaruh kepemimpinan transformasional kepala sekolah, dan motivasi kerja terhadap inovasi guru SD Negeri. Penelitian ini merupakan penelitian kuantitatif korelasional dengan tipe asosiatif. Instrumen penelitian menggunakan angket model Skala Likert. Uji coba dilakukan pada populasi di luar sampel sebanyak 30 orang. Kemudian data penelitian dianalisis dengan menggunakan skor rata-rata (Mean) untuk deskripsi data, uji persyaratan yaitu uji normalitas, uji homogenitas, uji linearitas dan uji multikolinearitas. Kemudian uji hipotesis menggunakan regresi linier sederhana dan pengujian regresi linier berganda menggunakan SPSS versi 24.0. Hasil analisis deskriptif inovasi guru sebesar 82,15%, kepemimpinan transformasional kepala sekolah sebesar 91,12%, dan motivasi kerja sebesar 91,51%. Hasil analisis data menunjukkan terdapat pengaruh yang signifikan antara kepemimpinan transformasional kepala sekolah terhadap inovasi guru sebesar 17,4%, terdapat pengaruh yang signifikan antara motivasi kerja terhadap inovasi guru sebesar 33,5%, dan terdapat pengaruh yang signifikan antara motivasi kerja terhadap inovasi guru sebesar 33,5%. kepemimpinan transformasional kepala sekolah dan motivasi kerja secara bersama-sama terhadap inovasi guru sebesar 35,3%.

ABSTRACT

Teacher innovation is the ability of a teacher to be creative in managing the learning process with the competence they has. Based on the pre-survey in the field, it is illustrated that the innovation of public elementary school teachers is still low. This study aims to analyze the effect of the principal's transformational leadership, and work motivation on the innovation of public elementary school teachers. This research is a correlational quantitative research with associative type. The research instrument used a Likert Scale model questionnaire. The trial was carried out on a population outside the sample of 30 people. Then the research data were analyzed using the average score (Mean) for data description, requirements test, namely the normality test, homogeneity test, linearity test and multicollinearity test. Then test the hypothesis using simple linear regression and multiple linear regression testing using SPSS version 24.0. The results of the descriptive analysis of teacher innovation were 82.15%, the transformational leadership of school principals was 91.12%, and work motivation was 91.51%. The results of the data analysis show that there is a significant influence between the transformational leadership of school principals on teacher innovation by 17.4%, there is a significant effect between work motivation on teacher innovation by 33.5%, and there is a significant influence between the transformational leadership of school principals and work motivation together on teacher innovation by 35.3%.

1. INTRODUCTION

Basic education is the foundation for students to learn as a whole in order to prepare themselves for social life, both locally, nationally and globally. Operationally, the main objective of basic education is to assist students in developing their intellectual and mental abilities, the process of development as an independent individual, the process of development as a social being, learning to live to adapt to various changes, and increasing creativity (Arasomwan & Mashiya, 2021; Arnyana & Utami, 2022; Wildová & Kropáčková, 2015). Therefore, this basic education can also be interpreted as the basis for further education of children. The demand for the quality of educational graduates is increasingly urging the government in line with developments in society and the world of work as well as changes in global competition that cannot be avoided (Arifa & Prayitno, 2019; I. P. Astuti, 2022; Wibawa et al., 2022). Anticipating changes that are so fast and challenges that are getting bigger and more complex, there is no other way for the government in

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its function as an organizer of development in the field of education and educational institutions to make every effort to increase the competitiveness of graduates and other academic products.

Quality education graduates can be achieved if there is synergistic cooperation between schools, the community, and the world of work as an educational output. Advanced educational graduates can be marked by the existence of a modernization in the world of education where modernization is closely associated with innovation. One of the factors hindering this innovation is due to the low level of harmonization of the relationship between school, community and the world of work (Asmahasanah et al., 2018; Mansyur, 2021; Zainal & Matore, 2019). School is an institution that provides quality human resources to work effectively and efficiently as one of the criteria for school productivity. For this reason, schools need someone who can lead in a good way so that they can bring change to the school for the better. And as an organization, schools must manage human resources properly so that the effectiveness and efficiency of creating productivity can occur (Eğriboyun, 2022; Fitriyani, 2019).

Innovation by teachers is an important factor in creating high quality education. Therefore, it is important for teachers to innovate, especially in learning (Díez et al., 2020; Tan et al., 2022). This type of educational innovation is an innovation that is needed in responding to changes in global competition in the world of work. Learning innovation is closely related to the development of technology, information and communication and societal changes that occur. Learning innovation through developing creativity by utilizing educational technology using the latest communication and information technology in the teaching and learning process, and realizing that each student has their own uniqueness so that something new is needed in order to achieve the needs of these students in getting their learning (Rahmatullah et al., 2022; Tuwoso et al., 2021).

Thus it can be concluded that teacher innovation is needed to support the teaching and learning process in schools so that it can produce the desired quality of students. Based on the author's observations, it shows that teacher innovation appears to be lacking and not optimal. This can be seen from the following phenomena: (1) Innovation in the elementary school teacher environment in Bukittinggi City has proven to be lacking, this can be seen from the lack of creation of learning media made by these teachers during Covid-19; (2) The low number of elementary school teachers in Bukittinggi City, especially those related to the use of IT media (based on the recap report of the elementary school supervisor, Mandiangin Koto Selayan sub-district); (3) Teachers still have difficulty determining learning media that suit students' needs, including in using the learning media (results of interviews with several elementary school teachers in Bukittinggi City).

Many factors can influence teacher innovation in carrying out their duties. One of them is the school principal's transformational leadership factor, which based on the results of the author's observations found that, in carrying out their leadership, school principals who tend to apply the principles of transformational leadership can be successful in increasing teacher innovation performance. Such transformational leadership will drive the plan and appreciate the periodic activities carried out by the staff (Asbari et al., 2019; Wardhani & Gulo, 2017). Transformational leadership is a leadership style that will support and motivate followers to do more than what is expected so as to minimize resistance to the implementation of innovations carried out by their teachers (Ángeles López-Cabarcos et al., 2022; Effendi, 2022).

Teachers need support from the principal as a leader in order to develop their learning creativity and innovation. The application of transformational leadership is carried out by principals at SMAN in Lubuak Linggau through developing a shared vision and building agreement on goals and providing support to teachers in providing examples of behaviour (Kusumah et al., 2021). In addition to rewarding high teacher performance, building cooperative structures, and strengthening school culture, being able to encourage teacher innovation as evidenced by the increasing level of teacher acceptance of new ideas both related to methods and learning media which are then applied in learning in class (A. P. Astuti et al., 2019; Gupta et al., 2022). Research on private high schools in the Paminjahan sub-district, Bogor Regency, also found the same results where the influence of strong transformational leadership can foster innovative work behavior for teachers there (Nurdin, F. et al., 2020).

The school principal's transformational leadership factor is significant and has a high contribution to the level of teacher innovation, as well as teacher work motivation which also has a high level of contribution to the level of teacher innovation. However, when combined together a higher level of contribution is found to the level of teacher innovation (Morrar et al., 2017; Suharyati et al., 2016). Based on the explanation above and given the importance of teacher innovation for the success of student learning in schools in dealing with the times, the authors feel the need to conduct further research on the factors that influence teacher innovation and how much these factors contribute to innovation. The aims of this study is to analyze the effect of the principal's transformational leadership, and work motivation on the innovation of public elementary school teachers.

2. METHODS

This study uses a correlational quantitative method with the type of "associative" research in which associative research is an attempt to determine the effect of the independent variables (the principal's transformational leadership and work motivation) on the dependent variable (teacher innovation) (Suryani & Maksum, 2020). With this method is intended to investigate and analyze the factors that are suspected to be the cause of the incident.

Population is a generalization area consisting of objects/subjects that have certain qualities and characteristics set by researchers to study and then draw conclusions (Sugiyono, 2019). The population is public elementary school civil servant teachers in the city of Bukittinggi, totaling 433 people. This study will use a stratified proportional random sampling technique. The reason for choosing to use this technique is the consideration to provide equal opportunity to each member of the population strata to be selected as the sample. This technique produces a sample with a proportion of groups within strata. Therefore, The sample size was obtained at Bukittinggi State Elementary School for each stratum and the total sample size was 148 teachers who were assigned randomly using a lottery system. This is done to provide equal opportunities for all members of the same population in the strata to become members of the sample.

The instrument used for data collection for the three research variables was a questionnaire prepared using the Likert Scale model with 5 alternative answers, namely Always (SL), Often (SR), Sometimes - Sometimes (KD), Rarely (JR), and Never (TP). Data collection was carried out after the results of the questionnaire trial data analysis were declared valid or reliable. To collect data from respondents, the authors used a questionnaire or questionnaire and analyzed using the correlation formula.

3. RESULT AND DISCUSSION

Results

This research was conducted on teachers who teach at public elementary schools in the city of Bukittinggi with a sample of 148 people. Prior to testing the hypothesis, a prerequisite analysis test was carried out, namely the normality test, homogeneity test, multicollinearity test and linearity test. Table 1 presents the normality test obtained.

Table 1. Normality Test Results

Statistics		Principal Transformational Leadership	Work Motivation	Teacher Innovation
N		148	148	148
Normal Parameters	Mean	0.0000000	0.0000000	0.0000000
	Std. Deviation	13.62527396	12.22486373	12.01797683
Most Extreme Differences	Absolute	0.080	0.069	0.083
	Positive	0.045	0.038	0.038
	Negative	-0.080	-0.069	-0.083
Test Statistic		0.972	0.845	1.004
Asymp. Sig. (2-tailed)		0.301	0.473	0.266

Base on Table 1 show the results of the data normality test using SPSS, taken the Kolmogrov-Smirnov test, obtained a significant value of transformational leadership for school principals 0.301, work motivation 0.473, and teacher performance 0.266, which is greater than 0.05 ($p > 0.05$), then the data normally distributed. Then do the homogeneity test. Table 2 presents the homogeneity test using SPSS.

Table 2. Homogeneity Test Results

Model		Levene Statistic	df1	df2	Sig.
X1X2	Principal Transformational Leadership	1.353	27	108	0.140
	Work motivation	1.126	30	107	0.321

Based on Table 2 show the results of the teacher innovation analysis which includes the transformational leadership of the school principal obtain a significance value of 0.140 and work motivation obtain a significance value of 0.321, which means that the variance of the group data is homogeneous. Next, a multicollinearity test is performed as shown in Table 3.

Table 3. Multicollinearity Test Results

	Model	Collinearity Statistics	
		Tolerance	VIF
	(Constant)		
1	Principal Transformational Leadership	0.744	1.345
	Work motivation	0.744	1.345

From [Table 3](#) it can be seen that the VIF value for the principal's transformational leadership variable is (1.345 < 10) and the tolerance value (0.744 > 0.10), work motivation (1.345 < 10) and the tolerance value (0.744 > 0.10). Thus it can be concluded that there is no multicollinearity problem or there is no relationship between the independent variables, namely teacher competence and work motivation. After that do a Linearity test using SPSS. The result is show in [Table 4](#).

Table 4. Linearity Test Results of The Principal's Transformational Leadership on Teacher Innovation

Source	Sum of Squares	dk	RJK	F	p
Deviation	7098.555	38	186.804	0.999	0.484
In Group	20191.714	108	186.960		
Total		147			

In [Table 4](#) it can be seen that the price of F = 0.999 with p = 0.484 (p > 0.05). This means that the regression equation is linear. Linearity test results work motivation to teacher innovation is show in [Table 5](#).

Table 5. Linearity Test Results Work Motivation to Teacher Innovation

Sumber	Jumlah Kuadrat	dk	RJK	F	p
Deviasi	7485.058	39	191.925	1.418	0.082
Dalam Kelompok	14483.694	107	135.362		
Total		147			

In [Table 5](#) it can be seen that the price of F = 1.418 with p = 0.082 (p > 0.05). This means that the regression equation is linear.

Discussion

The Influence of the Principal's Transformational Leadership on Teacher Innovation

The results of this study indicate that the principal's transformational leadership has a significant influence on teacher innovation, the tcount value for the principal's transformational leadership variable (X1) is 5.645 > ttable 1.976 (sig 0.000 < 0.05), then Ha is accepted. Thus it can be concluded that the principal's transformational leadership has a positive and significant effect on the innovation of public elementary school teachers in Bukittinggi City.

The regression equation above illustrates that the principal's transformational leadership has a significant influence on increasing teacher innovation. The effect of the principal's transformational leadership on teacher innovation is 17.4%. Based on the results of the descriptive analysis, it shows that the school principal's transformational leadership is in the very good category with an average score of 91.12%. Meanwhile, when viewed from each research indicator, it can be seen that the highest indicator is idealized influence which is in the very good category (92.34% of the ideal score), while for the lowest achievement indicator is the intellectual stimulation indicator which is in the very good category (90.33% of the ideal score). It turned out that of the four indicators of transformational leadership of school principals analyzed, it was found that all of them were in the very good category.

The results showed that the transformational leadership of school principals in providing intellectual stimulation felt by teachers was still not appropriate what to expect compared to other indicators. Intellectual stimulation in the principal's transformational leadership can be increased by approaching teachers such as scheduling meetings in order to encourage teachers to solve problems using new ideas and creative solutions. This is in line with the opinion of previous study school principals need to appreciate more ideas or new ideas given by teachers by holding regular meetings with teachers to be able to hear all the input given ([Şemin, 2019](#)). Likewise, what was conveyed by other study states that transformational leadership emphasizes the importance of intellectual stimulation to utilize the abilities of

followers (Arokiasamy et al., 2015). Followers are encouraged by their leaders to be innovative and creative. Solutions to new problems and creative ideas that are useful for approaching old and new work situations. For this reason, the principal must always provide intellectual stimulation so that teachers can innovate in the implementation of learning to improve the quality of education. If the principal's transformational leadership increases, teacher innovation will also increase.

The Influence of Work Motivation on Teacher Innovation

The results of this study indicate that work motivation has a significant influence on teacher innovation, the tcount value for the variable work motivation (X2) is $8.657 > t_{table} 1.976$ (sig $0.000 < 0.05$). then H_0 is accepted. Thus it can be concluded that work motivation has a positive and significant effect on the innovation of public elementary school teachers in Bukittinggi City. The regression equation above illustrates that work motivation has a significant effect on increasing teacher innovation. The effect of work motivation on teacher innovation is 33.5%. Based on the results of the descriptive analysis, it shows that work motivation is in the very high category with an average score of 91.51%. Meanwhile, when viewed from each research indicator, it can be seen that the highest indicator is Diligence which is in the very high category (93.30% of the ideal score), while the indicator with the lowest achievement level is the responsibility indicator which is in the very high category (90.51% of the ideal score). It turned out that of the four indicators of school work motivation analyzed, it was found that the average level of achievement of the respondents was in the very high category.

The results showed that the indicator of responsibility in carrying out the teacher's duties on the variable work motivation was felt to be lacking compared to other indicators. According to previous study argues that work motivation is a person's desire that creates encouragement from within him to do work that can be seen from his sincerity and liking for work that is carried out with full responsibility (Ordu, 2021). Teachers who have high motivation in carrying out their duties and responsibilities will always try and work hard to overcome all the problems faced with the aim of achieving better results. Therefore, a teacher's sense of responsibility in carrying out their duties to continue to innovate in the learning process is very necessary.

Teacher motivation has an important influence on teacher innovation, meaning that teacher innovation will emerge if it is influenced by teacher motivation. In innovating, teachers need motivation first, this motivation will encourage teachers to innovate in order to find solutions to the problems they face. As revealed by previous study that people who have high work motivation have the characteristics of (1) being responsible for all their actions, (2) trying to seek feedback, (3) daring to take risks with full consideration, (4) trying to do something innovative, (5) feeling chased by time, (6) working hard with pride in the results that have been achieved (Mphasha, 2022). Thus it can be stated that the work motivation of a teacher will also determine the innovations he does in carrying out the task, so it can be concluded that increasing teacher innovation can be done through motivation.

The Effect of Principal Transformational Leadership and Work Motivation on Teacher Innovation

The results of this study indicate that the principal's transformational leadership and work motivation have a significant influence together to increase teacher innovation. The magnitude of the influence of the principal's transformational leadership and work motivation together on teacher innovation is 35.3%, the remaining 64.7% is the contribution of other variables that influence teacher innovation of public elementary school teachers in Bukittinggi City which was not studied in this study. In other words, teacher innovation can be determined by the principal's transformational leadership and work motivation by 35.3%. The better the principal's transformational leadership and work motivation, the better the teacher's innovation.

Furthermore, the regression equation obtained by the principal's transformational leadership variable and work motivation with teacher innovation is $28.757 + 0.183X_1 + 0.566X_2$. This shows that the principal's transformational leadership and work motivation together have a positive influence on teacher innovation. Data analysis shows that teacher innovation is significantly influenced by transformational leadership and work motivation, both individually and collectively. The principal's transformational leadership and work motivation are two very important factors to note. A leader who has the transformational leadership style will always involve subordinates by increasing strong concern for them so that they can be motivated to work, develop their potential so that they find innovation in solving problems or obstacles they face. This is in line with opinion of previous study namely transformational leadership is a leadership style that will support and motivate followers to do more than what is expected so as to minimize resistance to the implementation of innovations carried out by their teachers (Komalasari, 2011).

Thus it can be believed that the principal's transformational leadership and teacher's work motivation can be a determining factor in increasing teacher innovation, so that these two variables can be used to further increase teacher innovation. The implications of this research can provide insight to school principals and educational administrators about the importance of developing a leadership style that supports teacher innovation and creates an environment that encourages work motivation. Principals need to develop and strengthen their leadership abilities, including the ability to motivate staff. However, this research also has limitations, the research does not consider all factors that can influence teacher innovation. Other variables not identified or considered in this study may have an influence on teacher innovation.

4. CONCLUSION

Based on the results of the analysis, it can be concluded as follows: (1) The results showed that the transformational leadership of school principals had a positive and significant effect on the innovation of public elementary school teachers in Bukittinggi City. (2) The results of the study show that work motivation has a positive and significant effect on the innovation of public elementary school teachers in Bukittinggi City. (3) The results of the study show that the innovation of public elementary school teachers in Bukittinggi City in terms of exploring opportunities, creating ideas, defending ideas and applying ideas obtains an achievement score in the "high" category. (4) The results of the study show that the principal's transformational leadership and work motivation together have a positive and significant effect on the innovation of public elementary school teachers in Bukittinggi City.

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