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The Effect of Principals' Leadership towards Effective Learning at an Indonesian Secondary School

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Abstract: The study aims to investigate the evaluation model of professional leadership and the characteristics of successful principals at an Indonesian secondary school. It is to further realize the effective learning and to produce instruments that meet the validity and reliability tests. It also aims to discover the correlation and the significance of the independent variables on the dependent variables, and the percentage of influence on the indicators in shaping the model of principals' leadership. Quantitative data were obtained by distributing questionnaires to 100 students. The number of respondents was determined using a simple random sampling technique. The research findings showed that there was a significant correlation among the principals' leadership, characters, and effective learning. It indicated that leadership evaluation influenced the school leadership and the principals' characters on effective learning. The results of the measurement on formative relationships showed that the indicators of behaviour and actions of school principals who manage the teachers to conduct learning activity seriously in the classroom became a determining factor in shaping the effective learning paradigm in secondary schools.

Keywords: *Leadership, effective learning, principals, leadership.*

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Introduction

Many researches on school leadership and management have been conducted by observers and researchers in the field of education. The results of these research in general show that the principals' leadership were widely seen as an important factor to embody an effective school (Gaol, 2017; Mortimore, 1993; Sammons et al., 1995; Setiyati, 2014). No research findings showed that effective schools were led by ineffective school principals (Ekosiswoyo, 2016; Ibrohim, 2016; Ishak et al., 2017; Oedjoe, 2016; Widiyastuti & Arikunto, 2015; Maris et al., 2016). The study of school principals' leadership has been reviewed from various leadership theories, for examples, the trait theory of leadership by Bass and Stogdill (1990), Pianda (2018), Prihantoro (2017), and Sudharta (2017). Next is the transformational leadership theory coined by Downton (2016), continued by Bass and Riggio (2010), and Cotton (2003). The concept of transactional leadership had been investigated by Kuhnert (1994), Kuhnert and Lewis (1987), and Academy and Review, (2010). Situational leadership is by Hersey and Blanchard (1988). Finally, effective leadership is by Mortimore (1993).

The late 20th-century researches on effective leadership has also evolved to ethical leadership (Ciulla, 2014). Leadership is not just a process of influencing others to achieve common goals, but the ethics of a leader is also an important factor that can affect the success of a leader in realizing the vision and mission of an organization (Sagnak, 2017). This understanding gives a meaning that a leader has an ethical responsibility to treat others of various human unique identities with respect (Herawati & Prayekti, 2015).

At present, many research on the leadership of principals focused more on the implementation of effective learning rather than the managerial aspects (Eggen & Kauchak, 2001; Gaol, 2017; Putra, 2018). Fitrah (2017) and Shelton (2011) explained that there had been a shift in the function of the principal from a managerial function to leadership learning.

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Mortimore (1993) further explained that the characteristics of effective schools reinforced some of the characteristics of effective schools, which were characterized by professional leadership with a firm and determined character, participatory approach, extensive knowledge about the curriculum and learning, and focus on the implementation of an effective learning process in the classroom.

What's more, Day and Sammons (2013), Gordon et al. (2016), Orphanos and Orr (2014), and Orr et al. (2018) argued that the principals' leadership that focused on the implementation of effective learning processes in the classroom was a model of leadership that could have a high effect on students' achievement. Day and Sammons (2013) have found from a review of 40 results of research that the school principals' leadership made a significant influence to students' achievement; this was mediated by the formation of attitudes and behaviour of teachers to seriously carry out learning activities (Ismail, 2017; Suhada, 2020; Suwandi et al., 2016; Taoefik et al., 2016). More explicitly, Day and Sammons (2013) concluded that efforts to improve students' achievement were carried out indirectly through improvements in the implementation of effective learning by teachers (El Islami et al., 2019; Fratiwi et al., 2020; Sagala et al., 2019). Accordingly, the quality of schools can only be improved by principals who are specifically more focused on supervising the implementation of learning in schools and classrooms.

The school principals' leadership can be defined as the behaviour of the school principals, which indirectly influences students' achievement through effective learning provided by the teachers. That is, the principals' leadership is the behaviour of the principals that directly influences teachers' performance in implementing effective learning, which then ultimately impacts students' achievement. Holifield and Cline (1997), Masnun (2017), Murtiningsih and Lian (2017), and Suhada (2020) stated that one of the main tasks of a school principal was to improve teachers' performance to be more serious in implementing learning in the classroom. This understanding has been agreed by educational experts and policymakers that school improvement efforts depend on the leadership of the principal who is more focused and serious in overseeing the effective learning process in schools.

The study of leadership when viewed from the outcome approach also includes successful leaders and unsuccessful leaders. According to Day and Sammons (2013), Fauzi (2018), Silaya (2017), and Zulkarnain et al. (2018), successful leaders and unsuccessful leaders are distinguished by the leaders' personality characteristics (traits theory of leadership) and behaviour (behaviour theories of leadership). According to the trait theory of leadership, the success of a leader is determined by his or her physical and psychological personality traits and characteristics. Henriyani (2018), Robbins and Judge (2013), and Wardani (2018) suggested that a successful leader, in leading an organization, was characterized by several characteristics, namely: fluency in talking, the ability to solve problems, group or organizational problems, flexibility, intelligence, willingness to accept responsibility, social skills, self-awareness and their environment. On the other hand, Yukl and Becker (2006) pointed out that the characters of a successful leader were: 1) having motive/traits, personality and values, 2) having confidence and optimism, 3) having skills and expertise, 4) having good behaviour, 5) having integrity/honesty, 6) having good ethics/ behaviour, 7) having influence tactics, and 8) having the attributions on followers.

Meanwhile, according to Faturahman (2018), Stogdill (1974), and Widyasari (2017), there are ten qualities of a successful leader, they are: 1) the desire to be responsible and to complete the tasks, 2) the enthusiasm and perseverance in pursuing goals, 3) courage to take risks and creativity in solving problems, 4) the willingness to conduct the initiatives in social situations, 5) believing and understanding one's self-identity, 6) the willingness to accept the consequences of decisions and actions, 7) readiness to understand interpersonal stress, 8) the willingness to tolerate frustration and procrastination, 9) ability to influence the behaviour of others, and, finally, 10) ability to form a system of social interaction for the sake of existing goals.

Moreover, Hasanah (2017) explained another seven important traits or habits of a successful school principal, namely: (1) having clear goals, (2) trying to understand the wants and needs of teachers, education personnel, students, and all school stakeholders, (3) being able to become agents of change, (4) being able to understand and appreciate staff performance and work performance, (5) having a spirit of openness and always being forthright, (6) always being fair, always building consensus, and lastly, (7) being a good communicator. On the other hand, Eggen and Kauchak (2001), Gulo (2017), Sakban et al (2019) argued that a successful headmaster was able to provide good service to all their subordinates to create a conducive work environment and a pleasant feeling for them to carry out their duties and responsibilities. Therefore, Eggen and Kauchak (2001) confirmed that successful leaders can: 1) provide good role models, 2) inspire a shared vision, 3) challenge the process of creating innovation, 4) empower others to act, and 5) uplift people's spirits.

Likewise, the research on effective learning has also been conducted by educational experts, such as Bistari (2017), Edmonds (1979), Hapsari et al. (2020), Maskur et al. (2020), Mortimore (1993), Nasution (2016), Sammons et al. (1995), and Setyosari (2017). According to Mortimore (1993), there are 11 characteristics of effective school teachers, four of which are related to effective learning, they are: 1) teachers who focus on learning, 2) teachers who conduct serious learning, 3) teachers who have high expectations for student achievement, and 4) teachers who conduct a continuous assessment of each student's cognitive, affective, and psychomotor behaviour.

Meanwhile, the findings from various studies explaining the principals' leadership and problems of unprofessional teachers have been the subject of much discussion (Isnaini, 2019). The low competency of school principals and unprofessional teachers, the diminishing commitment of teachers in carrying out tasks in school have become a visible

finding of researchers and observers in the field of education. The era of regional autonomy gives heads of district and city district an authority to appoint principals directly, in which were not based on their competency standards.

In view of that, it is necessary to explain the concept of professional leadership of the principals according to the concept of professional leadership, especially by Mortimore (1993), which is marked by several dimensions, e.g., being firm and determined to make school an agent of change, using participatory approaches in formulating various school policies and having the competence to oversee the learning process in class. The concept of successful leadership is the adoption of several concepts of successful leadership put forward by Bass and Stogdill (1990), Eggen and Kauchak (2001), Northouse (2018), Robbins and Judge (2013), Stogdill (1974), and Yukl and Becker (2006), which are then simplified into eight characteristics of a successful leader. Successful principals' leadership are tested in aspects related to each principal's personality in several ways: 1) the ability to formulate leadership vision, 2) the aspect of courage in taking risks, 3) the excitement aspect in overseeing the implementation of learning, 4) aspects of emotional control, 5) Judgment: the principal is wise and fair, 6) Resilience: the principal is optimistic, resilient and remains calm in a crisis and is energetic and thinks positively at all times, 7) Persuasive: the principal is a persuading and good listener, confident and proficient in describing their school to outsiders; and 8) Curiosity: the principal has a high curiosity about new ideas and has a good network with parties outside the school (Bass & Stogdill, 1990; Eggen & Kauchak, 2001).

To date, there have been no specific reports that illustrated the quality of leadership and characteristics of successful school principals in the Indonesian context, especially of the secondary schools. This quality of leadership can indicate the level of leadership of a school principal at the very successful, successful, and unsuccessful levels. Thus, this research is necessary to be conducted because the evaluation model of principals' leadership will help to improve the effective learning for secondary schools. Meanwhile, effective learning referred to in this study is a form of effective school implementation. Some concepts of effective schools generally have the same views of its characteristics (Azhar, 2017; Ibrohim, 2016; Widiyastuti & Arikunto, 2015). According to Mortimore (1993), the manifestation of effective learning is characterized by four indicators: 1) teachers who focus on learning, 2) teacher who takes the learning seriously, 3) teachers who have high expectations for student achievement, and 4) teachers who conduct a continuous assessment of each student's cognitive, affective, and psychomotor behaviour. In this case, it can be emphasized that the teacher gives a direct influence on the implementation of an effective learning process.

Methods

Research Goal

This study aims to discover the correlation and the significance of the independent variables on the dependent variables, and the percentage of influence on the indicators in shaping the model of principals' leadership in SMA Negeri 6 (or Public High School Number 6) in Padang, Indonesia. In consequence, several hypotheses are proposed:

- Ha₁:** There is a correlation between each of the principals' leadership variables (X_1), the character of successful principals (X_2), and effective learning (Y).
- Ha₂:** There is a jointly significant effect of the principal's leadership variable (X_1) and the principal's character (X_2) on effective learning.

Research Design

The design of this research is a combination of a survey research and a developmental research with a quantitative approach. According to Creswell and Creswell (2017), the survey research can collect data directly from the subject under study and make generalizations to the population. Meanwhile, the developmental research design, which follows the results of the survey research, can also collect data directly from the subject under study and make generalizations to the population. The developmental research design that follows the model by Borg and Gall (1989) is used to study the correlation between principals' leadership and effective learning and their characteristics in the high school under study.

Sampling and Data Collection

The population of this study referred to all students of SMA Negeri 6 Padang, amounting to 889 students. Using a simple random sampling technique, a number of 100 students were selected to be sample of this study. They were selected based on the number of 10 study groups; with details of three classes from grade X, four classes from grade XI, and three classes of grade XII.

Data were collected using a questionnaire as the research instrument to obtain information about the principal's leadership. The characteristics of successful principals were independent variables and the effective learning implementation was used as the dependent variable. The questionnaire design guidelines were based on the variables of this study so that the purpose of data collection followed the expected research objectives. The questionnaire further had a 5-point Likert scale to mark each statement. Respondents can provide answers to each statement by circling the number. The Likert scales used for part one of the questionnaire were: 5 = strongly agree, 4 = agree, 3 = fairly agree, 2 = disagree, and 1 = strongly disagree, and for part two there were 5 = always, 4 = often, 3 = sometimes, 2 = rarely, and 1 = never.

Data Analysis

All data obtained were analysed using descriptive statistics, statistical inference, and regression analysis with the help of using the Statistical Package for Social Sciences (SPSS) version 20. Item-total correlation test and Cronbach's alpha test and factor analysis using the Exploratory Factor Analysis were used to test the validity and reliability of the instruments of each variable studied. Meanwhile, confirmatory factor analysis was used to discover the instrument items that formed the single factor of the research variables.

Descriptive analysis was used to analyse the stages of implementation performance of each variable with a minimum score and standard deviation. The minimum interpretation score is determined based on a predetermined scale, as shown in Table 1.

Table 1. Minimum Interpretation Score Based on Scale

Range	Interpretation
1.00 to 1.89	Very Low (VL)
1.90 to 2.69	Low (L)
2.70 to 3.49	Medium (M)
3.50 to 4.29	High (H)
4.30 to 5.00	Very High (VH)

Additionally, Pearson correlation was used to analyse the research hypothesis to see the strength of the relationship between variables. The analysis findings (r) are interpreted into three phases: low, medium and high, and presented in Table 2:

Table 2. The Relationship between Two Variables

No.	Correlation Coefficient (r)	Relationship Strength
1.	$\pm 0.70-1.00$	High
2.	$\pm 0.30-0.69$	Medium
3.	$\pm 0.00-0.29$	Low

The Stepwise regression analysis was used to analyse the contribution of the independent variable to the dependent variable of this study.

Findings

The instrument test was conducted to 30 students representing class X, class XI, and class XII at the school under study. This trial was intended to determine the validity and reliability of the instrument by observing the Cronbach's alpha value according to Wahyuningsih (2015), the correlation value of items with a total score (r) greater than 0.30 indicates that the instrument items are valid or have high validity, and the alpha coefficient value > 0.7 indicates that the instrument items are reliable or have the reliability in measuring the same thing. Alpha value > 0.60 is the minimum reliability index for the use of this instrument (Wahyuningsih, 2015).

The results showed the reliability and validity estimation of the instruments for each variable. First, the results of the leadership variables of professional principals with 6 instruments obtained a range of correlation values of items with the total score of (r) > 0.30 between 0.593-0.780 and a Cronbach's alpha coefficient of 0.893. Second, the results of the success characteristics of the principal with 8 items obtained a range with a score correlation of (r) > 0.30 which was between 0.336-0.630 with a Cronbach's alpha coefficient of 0.792. Third, the results of the effective learning variable were 18 instruments for indicators of:

(1) Priority to learning, that was obtained by the range of item correlation values with the total score of (r) > 0.30 that was between 0.441-0.630 with a Cronbach's alpha coefficient of 0.768.

(2) Learning earnestly, that was obtained by a range of item correlation values with the total score of (r) > 0.30 that was between 0.515-0.733 with a Cronbach's alpha coefficient of 0.838.

(3) Continuous assessment, that was obtained by the range of item correlation values with a total score of (r) > 0.30 that was between 0.515-0.733 with a Cronbach's alpha coefficient of 0.786.

(4) High expectation of teacher for student achievement, that was obtained by the correlation range of items with a total score of (r) > 0.30 that was between 0.464-0.590 with a Cronbach's alpha coefficient of 0.716. This provided a conclusion that the item had a high validity value.

Meanwhile, the reliability value (Cronbach's alpha) instrument for all variables obtained an alpha value exceeding 0.60. This provided a conclusion that the item had a good reliability value as suggested by Creswell and Creswell (2017) that Cronbach's alpha values between 0.60 and 0.80 are accepted, while Cronbach's alpha values exceeding 0.80 are considered good. Meanwhile, Wahyuningsih (2015) explained that the Cronbach's alpha value exceeding 0.60 is often used as an index of confidence level in research.

Then, the results of the validity and reliability tests based on Cronbach's alpha were re-tested using the Exploratory Factor Analysis to obtain a KMO value ≥ 0.05 and an anti-image correlation value for each construct item > 0.05 . The results showed the acquisition of MSA (Measure of Sampling Adequacy) value of anti-image correlation and Matrix components for each instrument item with a loading factor > 0.5 and a rotated component matrix value of more than 0.5. From the results of this test, it can be concluded that the instrument was valid and formed certain factors on two independent variables and one dependent variable with four indicators. Whereas, the KMO and Bartlett's Test produced a value more than 0.5, which indicated that the KMO could be continued.

Furthermore, to discover the extent to which the items of the instrument remain as a single factor of each variable, it is necessary to proceed to the instrument analysis stage using confirmatory factor analysis. The results of the analysis showed that the component matrix values for each variable have formed a single factor, as shown in Table 3.

Table 3. Summary of Single Factor Analysis Results with Confirmatory Factor Analysis

The variables of Effective School		Instrument Items	Matrix Component	Falling Items
X1	Principal's leadership	6	.73 - .85	0
X2	Principal's character	8	.62 - .76	0
Y	Effective learning	18	.53 - .80	0
Total		32		0

From the instrument test results above, it can be concluded that the structure of the model that described the relationship of independent variables with the dependent variable had been tested to meet the validity and reliability of the instruments. Meanwhile, the measurement model that illustrated the relationship of effective learning (Y) as a latent variable with indicators, as a manifest variable, had also fulfilled the validity and reliability test. The next analysis is to test the significance of the relationship between variables and the formative relationship of the dependent variable with the indicators.

Moreover, the results of multiple linear regressions with the Stepwise method were used to test the H₂ hypothesis. The results of the analysis showed that the independent variables significantly influenced the realization of the implementation of effective learning in SMA Negeri 6 Padang, as shown in Table 4.

Table 4. The Results of Multiple Regression of The Relationship between Independent Variables and Dependent Variables

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	R Square Change	Influence
	B	Std. Error	Beta				
1 (Constant)	1.096	.294		3.727	.00		
X ₁	.681	.073	.684	9.294	.00	.468	46.8 %
2 (Constant)	.077	.366		.210	.01		
X ₁	.432	.090	.434	4.787	.00		
X ₂	.487	.117	.379	4.172	.00	.081	8.1 %

a. Dependent Variable: Y

Multiple linear regression analysis with the Stepwise method was also used to test the H₃ hypothesis to measure and discover the formative relationship between the four indicators, as manifest variables, with latent variables. The results of the Confirmatory factor analysis showed that the Effective Learning (Y) variable was formed based on four indicators as manifest variables, namely: teachers who prioritize learning (Y₋₁), teachers who conduct serious learning (Y₋₂), teachers who conduct a continuous assessment (Y₋₃), and high expectations of teachers for students' achievement (Y₋₄). To see how much each indicator (Y₋₁, Y₋₂, Y₋₃, and Y₋₄) as a manifest variable contributed to forming Y as a latent variable, it was analysed by measuring the formative model. The relationship model can be seen in Figure 1.

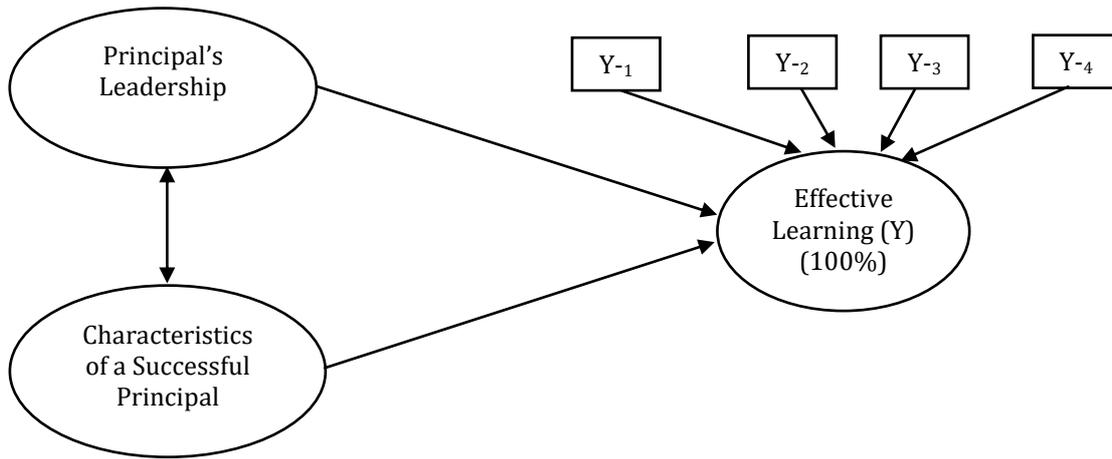


Figure 1. Y latent variables measured by indicators Y-1, Y-2, Y-3 and Y-4

After analysing the formative relationship of each indicator as a manifest variable with the construct of effective learning (Y), the percentage of the contribution of each indicator to the effective learning construct as a latent variable is obtained, as shown in Table 5.

Table 5. The Result of Multiple Regression of Effect of Manifest Variables of Y-1, Y-2, Y-3 and Y-4 on Latent Y Variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R Square Change	Influence
		B	Std. Error	Beta				
1	(Constant)	1.103	.124		8.900	.000	.834	83.4%
	Y-2	.736	.033	.913	22.184	.000		
2	(Constant)	.785	.086		9.180	.000	.096	9.6%
	Y-2	.483	.031	.600	15.661	.000		
	Y-4	.350	.030	.441	11.510	.000		
3	(Constant)	.155	.058		2.660	.009	.052	5.2%
	Y-2	.374	.017	.465	21.750	.000		
	Y-4	.298	.016	.375	18.675	.000		
	Y-3	.283	.017	.295	16.433	.000		
4	(Constant)	.003	.002		1.528	.130	.018	1.8%
	Y-2	.251	.001	.311	332.178	.000		
	Y-4	.250	.001	.315	423.975	.000		
	Y-3	.250	.001	.260	402.634	.000		
	Y-1	.249	.001	.262	277.115	.000		

Dependent Variable: Y

Table 5 implies that the indicator Y-2, “the behaviour and actions of teachers who carry out learning seriously in the class”, had a role as a determining factor in realizing Effective Learning (Y) in SMA Negeri 6 Padang by 83.4%. Next, the Y-2 indicator along with the Y-4 indicator gave an effect of 93%, which meant that the Y-4 indicator gave an effect of 9.6%. Furthermore, the Y-2 indicator along with Y-4 and Y-3 indicators gave an influence of 98.2%, which means that the Y-3 indicator gave an effect of 5.2%. Finally, the Y-2 indicator along with Y-4 and Y-3 and Y-1 indicators gave the effect of 100%, and the Y-1 contribution was 1.8%.

Discussion and Conclusions

To test the H₁, the Pearson correlation was used as shown in Table 2. The results of the overall analysis showed that there was a significant correlation with a correlation coefficient (r) > 0.70 between the leadership of the principal, the characters of the principal who succeeded as an independent variable, and effective learning as the dependent variable according to students' perceptions.

The indicators of professional school principal leadership correlated directly with the realization of effective learning in SMA Negeri 6 Padang. The indicators were that school principals should be wise in solving problems that occur in schools, be firm in controlling the implementation of learning in the classroom, have the initiative to improve the quality of learning, often discuss with teachers informally about approaches to improve the quality of learning, have

knowledge and skill in assessing teacher learning tools, and have leadership qualities that can bring schools towards an effective learning process. These findings were aligned with the findings of Maris et al (2016) and Mortimore (1993), which discovered that only professional headmaster's leadership could realize an effective learning process. Similarly, Sammons et al. (1995) also explained that the better professional leadership of the principal was, the more effective the learning process in schools improved school quality. The results of research conducted by Chater and Loewenstein (2016), Eggen and Kauchak (2001), Hallinger (2015), and Northouse, (2016) also supported the research findings of this study; they all showed close relationship between school leadership and effective learning. Likewise, Shelton (2011) further suggested that professional principal's leadership was one important factor for the realization of effective learning in schools and so were the characters of a successful principal.

A successful principal has indicators of having a vision statement and being able to formulate and shape a better future for the school, having the courage to take risks and being steadfast in challenging bad behaviour of school community who is against school rules, being passionate in supervising learning in each class and showing great commitment to students, showing good empathy for teachers, employees, and students. Furthermore, the school principle should also be wise and fair in solving every problem in the school, always be optimistic and resilient, staying calm in a crisis and energetic and positive at all times, be a persuader and good listener, confident and proficient in describing "school stories" to school communities and outsiders, have a high curiosity about new ideas and have a good network with parties outside the school. The whole indicators showed a minimum score with a correlation coefficient in the range of values (r) of $> 0.70-1.00$, meaning that eight characteristics of successful principals possessed by the headmaster of the school under study were indicators that correlated significantly with the realization of an effective learning process. The findings of this study were in line with Yukl (1989) who found that effective leaders were leaders who could recognize and solve problems well and maintain organizational relationships and were characterized by eight characters of successful leaders. Rasim (2014), Sanusi and Darmawan (2016) mentioned that leadership depends on the characters of leaders; there are those who have characters and there were those who did not have characters. A successful leader is characterized by the responsibility to bring the organization they lead under the vision and mission statements that are mutually agreed upon and to treat their subordinates well. Leaders who have good characters are one of the factors that can realize effective learning.

The overall effect value was 54.9% and the biggest influence was given by the principal's leadership variable (X_1) as much as 46.8% and the successful principal's character variable (X_2), which exerted an effect of 8.1% (see Table 4). The results of this research were in accordance with the results of 40 reviews conducted by Day and Sammons (2013) who emphasized that the principal's leadership significantly influenced students' achievement through serious learning conducted by the teachers. Here, the leadership implementation was the behaviour of the principal that directly influenced teachers' work performance in implementing effective learning, which ultimately impacted students' achievement. Furthermore, the results of research conducted by Holifield and Cline (1997), Masnun (2017), Murtiningsih and Lian (2017), and Suhada (2020) also supported the results of this study. Their research revealed that one of the main tasks of a school principal was to improve teachers' performance so that they can be more serious in conducting learning activities in the classroom. Likewise, the results of this study indicated that school improvement efforts depended on the leadership of principals who were more focused and earnest in overseeing the effective learning process in the classroom.

Based on Table 5, indicator Y_2 alone gave the biggest influence of 83.4% among the other three indicators. It can be said that the instrument items of indicator Y_2 played a massive role in realizing the implementation of effective learning in SMA Negeri 6 Padang. As perceived by the students, their teachers have prepared the lesson plans and informed them the subject matter to be delivered, and related last week's learning with the material that would be delivered today. The students also acknowledged that their teachers presented the material in a structured and systematic manner that was easily understood by them. Their teachers also used teaching strategies that varied according to students' abilities, and teachers gave the same treatment to all students even though they had different abilities from each other.

Students perceived that the teachers who had high expectations for them (Y_4) had the instrument items as follows:

1. My teachers provide additional time to teach students who have problems with learning materials;
2. My teachers provide enrichment program to students who have not yet completed the Minimum Standard of Mastery Level that has been set;
3. My teachers encourage and motivate students to excel in improving the reputation of the school;
4. My teachers inform students about the vision and mission statements of the school.

These items only determined an effective learning process of 9.60%.

In addition, those who conducted continuous assessment (Y_3) had instrument items as follows:

1. My teachers have a good assessment document about the daily test grades, midterm and final semester grades, and students' homework grades;

2. My teachers give the opportunity to students who have not yet completed a daily test or exam to retake daily test or exam;
3. My teachers assess students' overall abilities both in terms of knowledge, skills, and attitudes;
4. The assessment that my teachers do is not only about the mastery of the subject matter, but also every action and behaviour of the students.

These items only determined an effective learning process of 5.20%.

Meanwhile, students perceived that the teachers who prioritized learning (Y-1) were indicated by the instrument items below.

1. My teachers come to class on time and left the class on time according to the ringing of the school bell and class change time;
2. In delivering the subject matter, my teachers are more focused on the subject matter that must be mastered by students in accordance with the Minimum Standard of Mastery Level that has been set;
3. My teachers use a variety of teaching strategies to attract students' attention to focus more on the lesson;
4. In the delivery of subject matter, my teachers strive to create a warm learning atmosphere interspersed with humour;
5. My teachers examine students' homework carefully and return the results of the examination to students.

These items only contributed 1.8% to the effective learning process.

The results of this study corresponded to four characteristics of effective learning proposed by Mortimore (1993) and Sammons et al. (1995). The characteristics of good teachers as perceived by students are teachers who prioritize learning, teachers who conduct serious learning, teachers who conduct the continuous assessment, and teachers' high expectations for student achievement. However, Mortimore (1993) and Sammons et al. (1995) have not explained in detail the percentage of influence of each indicator. What is different from the findings of this study with other research findings is that the findings of this study can explain the level of the contribution of each indicator that plays a role in realizing the implementation of an effective learning process in secondary schools.

The principals' leadership in boosting effective learning consists of two independent variables, namely, the principal's professional leadership and the character of successful principals with several indicators and the dependent variable of effective learning, which is measured by using four indicators: 1) principals who manage teachers to focus on learning, 2) principals who manage teachers to conduct learning seriously, 3) principals who direct teachers to conduct the continuous assessment, and 4) principals who organize teachers to have high expectations for students. These four indicators have been tested theoretically and empirically. The results of the validity and reliability tests of the instrument showed that the items of the instruments of each of these variables were highly valid.

The results of Pearson correlation analysis showed that overall, there was a significant relationship between two independent variables and effective learning according to students' perceptions. The results of the Pearson correlation analysis indicated that there was a high-level significant relationship between the principal's leadership and effective learning. There was also a high-level significant relationship between the principal's characteristics and effective learning.

The results of the F-test variance proved that the principal's professional leadership and the character of the successful principal significantly influenced the effort to realize effective learning. While the formative relationship between effective learning as a latent variable was formed by four indicators, the results of the study showed that the indicator of "the behaviour and actions of the teachers who conduct serious learning environment in the classroom" acted as the main characteristics that contributed in realizing effective learning in schools. It implies that if a school principal strives to realize effective learning, they must give primary focus on the strict control of teachers' behaviour and actions in conducting a serious learning environment in the classroom.

Recommendation

The results of this study have provided an overview of the implementation of effective learning in schools, which was largely determined by indicators related to teachers as explained by Mortimore (1993) and Sammons et al. (1995). However, the research findings of Mortimore (1993) and Sammons et al. (1995) did not explain in detail the percentage of indicators in realizing the implementation of effective learning in school. Thus, future research is suggested to focus on collecting more data from a large number of secondary schools with good principal's leadership. It is also recommended to collect data from the staffs of the schools and related stakeholders. The data of this study were collected from only one school and thus, more access to data from other secondary schools in Indonesia is expected to

validate the conclusions of this study and explain the level of the contribution of each indicator that plays a role in realizing the implementation of an effective learning process in secondary schools.

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