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Employee Information System (SIP): The role of work motivation, communication and coordination in improving employee performance

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ABSTRACT

Employee Information System (SIP) is a system designed to manage information related to employees in an organisation or company. The main purpose of the Employee Information System is to assist in managing employee data efficiently and effectively. The aim of the study was to determine the effect of work motivation, communication and coordination partially on performance and to determine the effect of work motivation, communication and coordination simultaneously on the performance of employees of the Bekasi City Sharia Cooperative. The method used is data collection methods and data analysis methods using statistical calculations. The regression coefficient value of Work Motivation b1 = 0.137, has a tcount value of 1.237 and probability Sig = 0.223 > 0.05, then the value of the regression coefficient of work motivation is said to be insignificant and can be interpreted that if work motivation increases by one unit, employee performance increases by 0.137 units assuming constant communication and coordination. Communication regression coefficient b2 = 0.314, has a t-count value of 2.362 and probability Sig = 0.023>0.05, then the value of the communication regression coefficient is said to be insignificant and can be interpreted that if communication increases by one unit, employee performance increases by 0.314 units with assumption of constant work motivation and communication. The value of the coordination regression coefficient b3 = 0.387, has a t-count value of 3.147 and the probability Sig = 0.003 > 0.05, then the value of the coordination regression coefficient is said to be significant and can be interpretednamely if coordination increases by one unit, employee performance increases by 0.387 units with the assumption constant work motivation and communication. This study contributes to work motivation, communication and coordination simultaneously on employee performance. The effect of work motivation, communication and coordination on performance simultaneously is shown by the results of the analysis, that the effect of work motivation, communication and coordination is shown by the value of the regression coefficient b1 = 0.137; b2 = 0.314; and b3 = 0.387. Significant value at the 5% test level because it has F count > F table (16.184>2.833) and sig α (0.000<0.05). The consequences of this study are limited to the research variables of work motivation, communication, coordination, and employee performance. In addition, the object of research is only within the scope of the Bekasi City Sharia Cooperative.

1. Introduction

Employee Information System (SIP) is a system designed to manage information related to employees in an organisation or company. The main purpose of Employee Information System is to assist in managing employee data efficiently and effectively. Some of the common components and functions contained in the Employee Information System involve: Employee Data, Job Data, Salary and Benefits, Attendance and Timesheet, Employee Development. Performance Evaluation, Document Management, Security System, Reporting, Employee Self-Service, System Integration. Implementation of Employee Information System can help organisations to manage human resources more efficiently, improve productivity, and support data-driven decision making related to the workforce.

Performance is an fulfillment or end result of work in an pastime or interest or application that has been planned previously in an effort to gain the dreams and goals set by way of an organisation and accomplished inside a certain period of time which is stimulated through numerous factors. Employee overall performance is considered crucial for the corporation because of the fulfillment of an organisation because the achievement of an enterprise is inspired via the performance itself. Performance or paintings overall performance is the result of labor executed through an worker in sporting out duties consistent with the duties given to him.

[1] stated that the elements that affect performance are capability and motivational elements. Every company or organization will attempt to improve the performance of personnel to achieve organizational dreams that have been set. Various approaches are taken to improve worker performance, as an example via schooling and training, presenting compensation and motivation and developing an awesome work surroundings. Therefore efforts to enhance employee performance are the maximum critical control task due to the fact success in attaining the corporation's survival desires relies upon at the fine of the performance of the human assets in it.

Larry D. Stout in Hassel Nogi (2005) indicates that the measurement and evaluation of organizational performance is the technique of recording and measuring the fulfillment of the implementation of sports in the route of reaching the project (mission accomplishment) through the results displayed inside the form of merchandise, offerings or a procedure.

The aim of the study was to determine the effect of work motivation, communication and coordination partially on performance and to determine the effect of work motivation, communication and coordination simultaneously on the performance of employees of the Bekasi City Sharia Cooperative.

2. Method

This kind of research is descriptive and quantitative research, namely research on information collected and expressed within the shape of numbers, although also within the shape of quantitative statistics as a assist. Such as phrases or sentences arranged in questionnaires, sentences due to consultations or interviews between researchers and informants.

Quantitative facts is records within the shape of numbers or qualitative facts this is calculated. The qualitative facts this is calculated, for instance, is contained within the measurement scale. A statement/question that requires alternative solutions, strongly agree, disagree in which respectively: strongly agree is given some of five, agree four, quite agree three, disagree 2, and strongly disagree 1 [2].

The populace is a entire group of factors and is typically inside the form of human beings, items, transactions or events where we're interested in gaining knowledge of or being the object of studies (Kuncoro, 2003). The population is described as a set of elements or elements of this population is usually a unit of analysis. The populace can be a group of all employees inside the Ukhuwah Syariah Cooperative in Bekasi City. So that the populace is personnel inside the Ukhuwah Syariah Cooperative in Bekasi City, namely as many as forty humans.

[3] if the populace is less than 100 human beings, then the entire pattern is taken as an entire, but if the population is more than 100 people, then 10-15% or 20-25% of the overall populace can be taken. Based on this studies, due to the fact the whole populace isn't greater than 100 respondents, the authors took one hundred % of the whole populace in all personnel of the Ukhuwah Syariah

Cooperative in Bekasi City, totaling fourty respondents. Thus the usage of the entire population while not having to draw a research pattern as a unit of observation is referred to as a census method

3. Results and Discussion

3.1. Data Validity Test

Validity is the level of measurement at the measuring instrument used. The tool is stated to be legitimate, which means that the measuring device used to obtain facts is legitimate or can be used to degree what have to be measured [4]. Thus, a legitimate tool is an instrument this is certainly suitable for measuring what it is supposed to degree. Masrum quoted by means of Sugiyono (2001) states that the minimum requirement to be considered legitimate is r = 0.3. So if the tolerance among gadgets with a total rating of much less than 0.3 then the objects inside the instrument are declared invalid. Testing the validity of data in this examine protected motivation (variable X1), communique (variable X2), coordination (X3) and performance (variable Y).

3.2. X1 Variable (Motivation)

Variable X1 on this study is motivation with a view to be assessed on 10 assertion items about motivation (X1) which were tested on 40 respondents. Data is said to be valid if it has a minimum requirement to be considered legitimate, specifically r = 0.3.

Table 1. Item-Total Statistics

	Scale Mean If Deleted	Scale Variance If Item Delected	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's alpha if tehm Deleted
No. 1	32.75	11.577	.3.72	.678	.726
No. 2	32.93	11.610	.369	.356	.726
No. 3	32.85	11.413	.324	.221	.736
No. 4	32.88	12.061	.432	.342	.720
No. 5	32.85	10.797	.588	.701	.693
No. 6	32.98	11.410	.405	.561	.721
No.7	33.15	11.618	.416	.646	.719
No. 8	33.18	11.020	.455	.717	.713
No. 9	32.88	12.163	.353	.412	.728
No.10	32.98	11.615	.359	.430	.728

The table shows the Corrected Item-Total Correlation value and compares it with the value of r Produc Moment or = 0.3 as in the following table:

Table 2. Motivational Variable Validity Test (X1)

Questionnaire	R.Count	R=0,3	Conclusion
No.1	0,372		Valid
No.2	0,369		Valid
No.3	0,324		Valid
No.4	0,432		Valid
No.5	0,588		Valid
No.6	0,405	>0,3	Valid
No.7	0,416		Valid
No.8	0,455		Valid
No.9	0353		Valid
No.10	0,359		Valid

The results of the validity test of the motivational variable (X1), it can be seen that in the corrected Item-Total Correlation column, where the statement items number 1 to number 10 show the validity of the data and the resulting value is> 0.3. In the results it is known that the highest validity value is 0.588 (question item no. 5), and the lowest validity value is 0.324 (question item no. 3). Thus the data on work motivation can be categorized as meeting the data validity requirements.

3.3. X2 Variable (Communication)

Variable X2 in this study was communication and an assessment was made of 10 statements about communication (X1) which were tested on 40 respondents. Data is said to be valid if it has the minimum requirement to be considered valid, which is r = 0.3.

Table 3. Item-Total Statistics

	Scale Mean If Deleted	Scale Variance If Item Delected	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's alpha if tehm Deleted
No. 1	33.18	52.020	.323	.342	.760
No. 2	33.15	22.079	.406	.386	.727
No. 3	32.87	23.958	.318	.391	.752
No. 4	33.45	21.792	.413	.379	.726
No. 5	33.15	21.259	.508	.455	.712
No. 6	33.18	19.687	.620	.605	.691
No.7	33.15	20.951	.526	.605	.708
No. 8	33.07	19.610	.670	.573	.684
No. 9	33.22	21.666	.448	.439	.721
No.10	33.22	24.999	.320	.396	.765

The table shows the Corrected Item-Total Correlation value and compares it with the value of r Produc Moment or = 0.3 as in the following table:

Table 4. Test the Validity of Communication Variables (X2)

Questionnaire	Rcount	R=0,3	Conclusion
No.1	0,323		Valid
No.2	0,406		Valid
No.3	0,318		Valid
No.4	0,413		Valid
No.5	0,508		Valid
No.6	0,620	>0,3	Valid
No.7	0,526		Valid
No.8	0,670		Valid
No.9	0,448		Valid
No.10	0,320		Valid

The results of the validity test of the work motivation variable (X2), it can be seen that in the corrected Item-Total Correlation column, where statement items number 1 to 10 indicate data validity and the resulting value is >0.3. In the results it is known that the highest validity value is 0.670 (question item no. 5), and the lowest validity value is 0.318 (question item no. 3). Thus the data about this communication can be categorized as meeting the data validity requirements.

Table 5. Item-Total Statistics

	Scale Mean If Deleted	Scale Variance If Item Delected	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's alpha if tehm Deleted
No. 1	34.05	8.613	.340	.210	.761
No. 2	34.18	8.148	.461	.407	.745
No. 3	34.20	8.267	.524	.585	.739
No. 4	34.20	8.421	.407	.329	.753
No. 5	34.15	8.644	.417	.383	.752
No. 6	34.22	7.769	.510	.320	.738
No.7	34.12	8.522	.323	.386	.765
No. 8	34.10	8.503	.343	.475	.762
No. 9	34.15	8.695	.397	.465	.754
No.10	34.18	7.481	.629	.504	.719

The following table shows the Corrected Item-Total Correlation value and compares it with the value of r Produc Moment or = 0.3 as in the following table:

Table 6. Coordination Variable Validity Test (X3)

Questionnaire	Rcount	R=0,3	Conclusion
No.1	0,340		Valid
No.2	0,461		Valid
No.3	0,524		Valid
No.4	0,407		Valid
No.5	0,417		Valid
No.6	0,510	>0,3	Valid
No.7	0,323		Valid

No.8	0,343	Valid
No.9	0,397	Valid
No.10	0,629	Valid

The results of the validity test of the work motivation variable (X3), it can be seen that in the corrected Item-Total Correlation column, where statement items number 1 to number 10 indicate data validity and the resulting value is >0.3. In the results it is known that the highest validity value is 0.629 (question item no. 10), and the lowest validity value is 0.323 (question item no. 7). Thus the data on coordination can be categorized as meeting the data validity requirements.

3.4. Variable Y (Performance)

The variable Y in this study was performance and an assessment was made of 10 statement items about performance (Y) which were tested on 40 respondents. Data is said to be valid if r = 0.3.

Table 7. Item-Total Statistics

	Scale Mean If Deleted	Scale Variance If Item Delected	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's alpha if tehm Deleted
No. 1	35.80	7.959	.356	.329	.685
No. 2	35.70	8.113	.366	.392	.700
No. 3	35.88	7.753	.366	.321	.683
No. 4	35.88	8.061	.368	.336	.700
No. 5	35.88	7.958	.300	.340	.695
No. 6	55.82	7.430	.591	.476	.650
No.7	53.80	7.549	.450	.424	.669
No. 8	35.75	7.423	.403	.387	.677
No. l9	35.85	7.977	.310	.307	.693
No.10	35.62	7.625	.377	.374	.682

The following table shows the Corrected Item-Total Correlation value and compares it with the value of r Produc Moment or = 0.3 as in the following table:

Table 8. Performance Variable Validity Test (Y)

Questionnaire	Rcount	R=0,3	Conclusion
No.1	0,356		Valid
No.2	0,366		Valid
No.3	0,366		Valid
No.4	0,368		Valid
No.5	0,300		Valid
No.6	0,591	>0,3	Valid
No.7	0,450		Valid
No.8	0,403		Valid
No.9	0,310		Valid
No.10	0,377		Valid

The effects of the paintings variable validity check (Y), it could be visible that within the corrected Item-Total Correlation column, in which statement gadgets number one to ten suggest information validity and the ensuing cost is > 0.3. In the effects it's miles recognized that the best validity cost is 0.591 (query object no.6), and the bottom validity price is 0.Three hundred (question object no.5). Thus the facts about this paintings can be categorised as meeting the facts validity requirements.

3.5. Reliability Test

Reliability is a measure that shows that the measuring device utilized in behavioral research has reliability as a measuring device, that's measured through the consistency of measurement outcomes every so often if the phenomenon being measured does now not alternate (Harrison, in Zulganef, 2006). While validity is a measure, it's miles absolutely a variable that researchers want to look at (Cooper and Schindler, in Zulganef, 2006). According to Sukadji (2000) the reliability of a test always measures the target being measured.

The results of the reliability check on the query gadgets on the paintings motivation variable (X1) are as A variable announcement is said to be dependable if it offers a Cronbach Alpha fee> 0.60. So it can be said that the statement gadgets for the motivational variable (X1) are dependable.The results of the reliability test on the questions on the conversation variable (X2) are as follows A variable announcement is stated to be reliable if it offers a Cronbach Alpha value of > 0.60. So it can be said that the statement gadgets for the communique variable (X2) are dependable.The X3 variable in this look at changed into coordination and an assessment was fabricated from 10 statement items approximately coordination (X3) which were tested on 40 respondents. Data is said to be legitimate if it has a minimum requirement to be considered valid, namely r = 0,3.Three. A variable assertion is said to be reliable if it offers a Cronbach Alpha price> 0.60. So it is able to be stated that the assertion objects for the overall performance variable (Y) are reliable

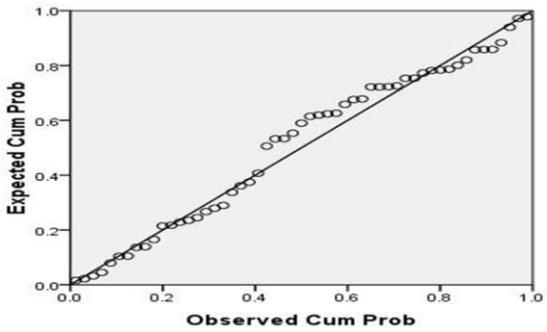
3.6. Classic assumption check

Classical assumption test statistical requirements that ought to be met in multiple linear regression evaluation based totally on everyday least squares (OLS). So a regression evaluation that is not based totally on OLS does no longer require classical assumption requirements, for example logistic regression or ordinal regression.Likewise, now not all classical assumption tests must be accomplished in linear regression evaluation, for example multicollinearity checks are not completed in easy linear regression evaluation and autocorrelation tests do no longer need to be carried out to pass-sectional information.The classical assumption check is also now not necessary for linear regression evaluation which targets to calculate the value of sure variables.For example, the cost of stock returns calculated the use of the market version, or the market adjusted model.The traditional assumption check that is regularly used is the multicollinearity test, heteroscedasticity check, normality check, autocorrelation test and linearity take a look at, the outcomes of which might be as follows:

3.7. Normality Test

The normality take a look at is to see whether or not the residual values are commonly distributed or not. A good regression model is to have usually dispensed residual values. So the normality test is not executed on every variable but on the residual value.

Fig. 1. Normalization



With the existing results it can be concluded that the linear regression model in this study is feasible to use.

3.8. Multicollinearity Test

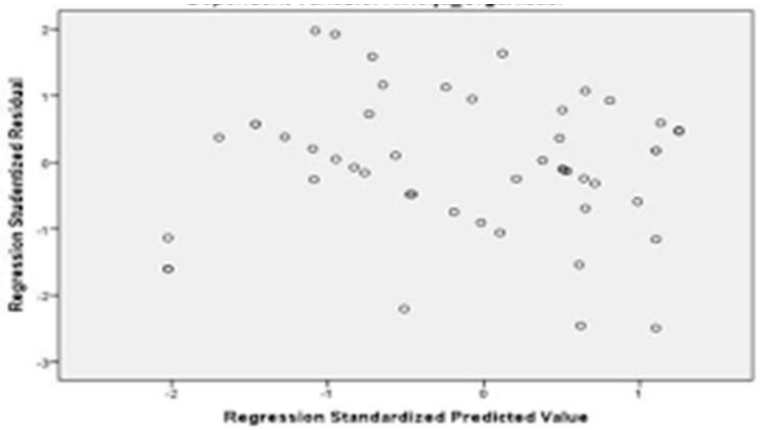
The multicollinearity test is to see whether or not there is a high correlation between the independent variables in a multiple linear regression model. If there is a high correlation between the independent variables. So the relationship between the independent variable and the dependent variable is disrupted. The statistical tool that is often used to test multicollinearity disorders is the variance inflation factor (VIF). The results of the multicollinearity test in this study. Based at the effects of statistics processing within the desk above, none of the unbiased variables (motivation, verbal exchange, and coordination) have a Tolerance of < 0.1, which means there is no correlation between the independent variables. Calculation of the value of the inflation factor (VIF) variable also shows that none of the independent variables has a VIF value > 0.05, so it may be concluded that in the regression version there's no multicollinearity.

3.9. Heteroscedasticity Test

The heteroscedasticity take a look at is to see whether there is an unequal variance from the residual one observation to any other. Regression fashions that meet the necessities are in which there may be a comparable variance from the residual of 1 statement to some other constant commentary or it's miles known as homoscedasticity.

Heteroscedasticity detection may be carried out the use of the scatter plot approach by using plotting the ZPRED price (expected cost) with SRESID (residual cost). A proper version is received if there's no precise sample at the graph, inclusive of amassing within the center, narrowing then widening or conversely widening then narrowing, can be defined as follows:

Fig. 2. Heteroscedasticity Test



A top regression model does now not comprise factors of heteroscedasticity (homoscedasticity). This approach that the variance of the impartial variable is steady (fixed) for every precise cost of the unbiased variable.

3.10. Multiple Regression Test

Based on the results of the number one information regression which become processed the use of SPSS version sixteen, the more than one linear regression equations had been received on this take a look at as follows

Table 9. Multiple Regression

	Standardized Coefficients		
	Beta	**I**	**Sig**
(Constant)		.598	.554
Motivation	.303	2.530	.016
Communication	.328	2.693	.011
Coordination	.372	3.051	.004

The table shows the values of the multiple linear regression equation :

$$Y= 0.303X1 + 0.328X2 + 0.372X3$$

The that means of the name of the above equation is

1. The coefficient (X1) = 0.303 indicates that motivation without delay impacts overall performance. So that if motivation is multiplied by way of one unit, overall performance will boom.
2. The coefficient (X2) = 0.328 suggests that verbal exchange without delay affects overall performance. So that if employee verbal exchange is extended by way of one unit, worker performance will growth.

3. The coefficient (X3) = 0.372 suggests that coordination immediately influences overall performance. So that if coordination is increased through one unit, the worker's overall performance will growth.

3.11. Hypothesis

1) Test t

The t test is used to partly take a look at each variable. The outcomes of the t test can be visible within the coefficients desk in the sig (significance) column. If the chance fee of t or significance <zero.05. So it can be stated that there's have an impact on among the impartial variable at the established variable partly.

Table 10. Coefficients

	Standardized Coefficients		
	Beta	t	Sig
(Constant)			
Motivation	.016	.858	1.165
Communication	.011	.831	1.203
Coordination	.004	.829	1.207

In the following desk, the calculated t value for each impartial variable is acquired. The ensuing t calculated price is then compared with the t table fee at α = 0.05 that's 2.470. When defined as follows, the individual impact of the motivational variable (X1) is received with a t-remember fee of 2.530 > 2.470 (sig 0.016 <0.05) thus t-count> table, then Ho is rejected and Ha is familiar, which means that that individual motivation has a giant effect on worker overall performance.

2) Test F

The F test is used to determine the impact of the impartial variables together (concurrently) at the based variable. Significant method that the relationship that occurs can apply to the populace.

Table 11. Test F

ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	204.538	3	68.179	15.036	.000[a]
Residual	163.27	36	4.534		
Total	367.775	39			

Motivational variables (X1) conversation (X2) and coordination variables (X3) simultaneously have a massive impact on worker performance at the Ukhuwah Sharia Cooperative in Bekasi City.

3) Coefficient of Determination (Adjusted R Square)

This check goals to decide the percentage or total percent of version within the based variable that's defined via the independent variables together. If the analysis used is straightforward regression, then what is used is R Square. But if the evaluation used is R Square, however if the analysis used is more than one regression.

Discussion

The Effect Of Work Motivation On Employee Performance

The consequence of the regression test shows that work motivation has an influence on overall performance of 0.263, the effect of work motivation on performance is stated from the proof of t-account > t-table or probability sig. 0.011 < 0,05. Thus the hypothesis is accepted, meaning that work motivation has a positive and significant influence on employee performance.

The Effect Of Communication On Employee Performance

The impact of statistical tests shows that communication affects employee performance by 0.349, the impact of communication on employee performance is said to be very large from the evidence of the t-account value > t-table and probability sig. 0,016 < 0,05. Thus Ha is accepted, meaning that communication has a positive and significant effect on employee performance.

The Effect Of Coordination On Employee Performance

The statistical test results show that coordination affects performance by 0.367. The impact of coordination on employee performance is stated to be quite good seen from the evidence of t-account > t-table and sig probability value of 0.011 < 0.05. Thus Ha is accepted, meaning that coordination has a considerable influence on overall employee performance.

The Effect Of Work Motivation, Communication nd Coordination On Employee Performance

Work motivation, communication, and coordination have been tested so that they can improve performance. The influence between work motivation is said to be large, seen from the evidence of the value of the F-count > F-table and the sig chance value of zero.000 < 0.05. Thus the hypothesis stating that there is a large influence between work motivation, communication and coordination together on employee performance. The contribution of work motivation, communication and coordination collectively to performance improvement is 61.7%, and the remaining 38.3% is inspired through various factors outside these three factors, such as: compensation, organisational commitment..

4. Conclusion

Employee Information System (SIP) is a system designed to manage information related to employees in an organisation or company. The main purpose of the Employee Information System is to assist in managing employee data efficiently and effectively.

The consequence of the regression test shows that work motivation has an influence on employee performance. Thus the hypothesis is accepted, meaning that work motivation has a positive and significant influence on employee performance. Communication affects employee performance. Thus Ha is accepted. Coordination affects employee performance. Thus Ha is accepted, meaning that coordination has a considerable influence on employee performance.

Together, work motivation, communication, and coordination have been tested so that they can improve performance. Thus the hypothesis stating that there is an influence between work motivation, communication and coordination together on employee performance is accepted.

The researcher gave suggestions: (1) Work motivation at Ukhuwah Syariah Cooperative Bekasi City is proven to affect performance. In the future, work motivation must also be increased in order to have a stronger influence on overall worker performance. Increasing worker motivation can be done by offering all the financial and non-financial needs that have been encouraging personnel. (2) Communication has proven to be very beneficial for employees to work with the best quality. The necessary conversations are both vertical and horizontal, meaning that communication is well established between superiors and subordinates and subordinates and subordinates. The established communication must be clean so that there is no misunderstanding between employees in the Bekasi City Sharia Ukhuwah Cooperative environment. (3) The coordination aspect is proven to have a considerable influence on improving overall employee performance. Coordination must be able to realise the three Ss, namely harmony, harmony and stability. Coordination must be carried out endlessly, namely a series of activities that can be interconnected, occur continuously, are always sought and usually emphasised so that there is a reference to previous activities. Performance in the Ukhuwah Syariah Cooperative Bekasi City must be prioritised. To improve performance, apart from being supported by work motivation, high communication and good coordination are also needed. In addition, the leader's function is also able to direct, inspire and inspire employees to improve their competence and knowledge in their fields according to their knowledge.

References

[1] A. A. A. P. Mangkunegara, *Manajemen sumber daya manusia perusahaan*. Remaja

Rosdakarya, 2000.

[2] Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, R & D.* Bandung-Indonesia: Penerbit Alfabeta Bandung, Indonesia, 2009.

[3] S. Arikunto, "Metode peneltian," *Jakarta: Rineka Cipta*, 2010.

[4] D. Sugiyono, "Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D," 2013.